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Volume IV
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NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

January 1963

Dear Doctor:

Americans spent $116 per person for health care purposes last year as opposed to $87 in 1956, an increase of 33 per cent. Final tally for fiscal 1961 showed nation's health spending exceeded $21 billion, up 6 per cent over preceding year.

> Medical care slice of take-home pay went up only 1 per cent in five years but income zoomed 17 per cent in same period. The physician's share of health care dollar is down to $.25 with hospital portion more than doubled in 30 years. Present trend in drug costs is down.

Despite what your own eyes saw, "MD-1234," doctors in Tupelo do not have special auto tags this year. The "M" is code symbol for Lee County and "D" is auto weight classification. Trick is that the 17 biggest counties have letter symbols while others have only number.

New 88th Congress, meeting this week, has only four physician-members as compared with seven in 1961-62 sessions. Losers were Drs. Judd (R., Minn.) and Fenton (R., Pa.) in bids for re-election while Dr. Alford (D., Ark.) bowed out and lost governor's race and Dr. Durno (R., Ore.) failed in try for senate. Drs. Gruening (D., Alaska), Hall (R., Mo.), and Morgan (D., Pa.) were re-elected and James D. Weaver (R., Pa.) was only successful physician-new-comer.

Medical missionaries to British Nyasaland will be reporting "organized competition," what with recent goings on among local witchdoctors. Not only have the hokus-pokus natives banded together, they have even adopted a written constitution to form the first really formal witchdoctor society in Africa.

People in Florida "see through a glass darkly" and are literally cutting themselves up in the process. U.S. Public Health study in Dade County (Miami) predicts 40,000 glass door accident injuries in 1963 after surveying growing number of home accidents involving patio door and window wall glass enclosures. One out of four such breakage mishaps involved a major injury which occurred twice as often to men as women.

Sincerely,

Rowland B. Kennedy
Executive Secretary

DATELINE - MEDICAL AMERICA

Suits Pile Up Against Merrell Over Thalidomide And MER-29

Philadelphia - Parents of an 18 months old baby have filed suit against William S. Merrell Co. seeking $2.4 million damages for alleged deformities of child said to have resulted from mother's taking thalidomide during pregnancy. At Great Neck, L.I., parents of twins are seeking $2.2 million on similar allegations. A Memphis physician has sued Merrell, claiming MER-29 caused cataracts of both eyes, hair loss, and skin discoloration. He seeks $100,000 damages.

ODMC Institutes Personal Injury Recovery Procedure

Washington - The Office for Dependents' Medical Care says that Uncle Sam will henceforth try to recover costs of care when a party is legally liable for a service dependent's injuries. New program requires statement from dependent but does not involve physicians. Information will be furnished through hospitals and payment under Medicare program will be made as before. Law has contained recovery authorities since 1956 enactment.

New FAA Aeromedical Facility Is Dedicated

Oklahoma City - The Civil Aeromedical Research Institute, occupying civil aviation's largest building in the U.S., was dedicated "to give human factors in aviation the same attention long given the airplane." The mammoth facility will house the Civil Air Surgeon's entire staff and laboratories working with every physical and mental aspect of flying. CARI even has an indoor miniature ocean where real aircraft are "ditched" under simulated emergency conditions to test human reactions.

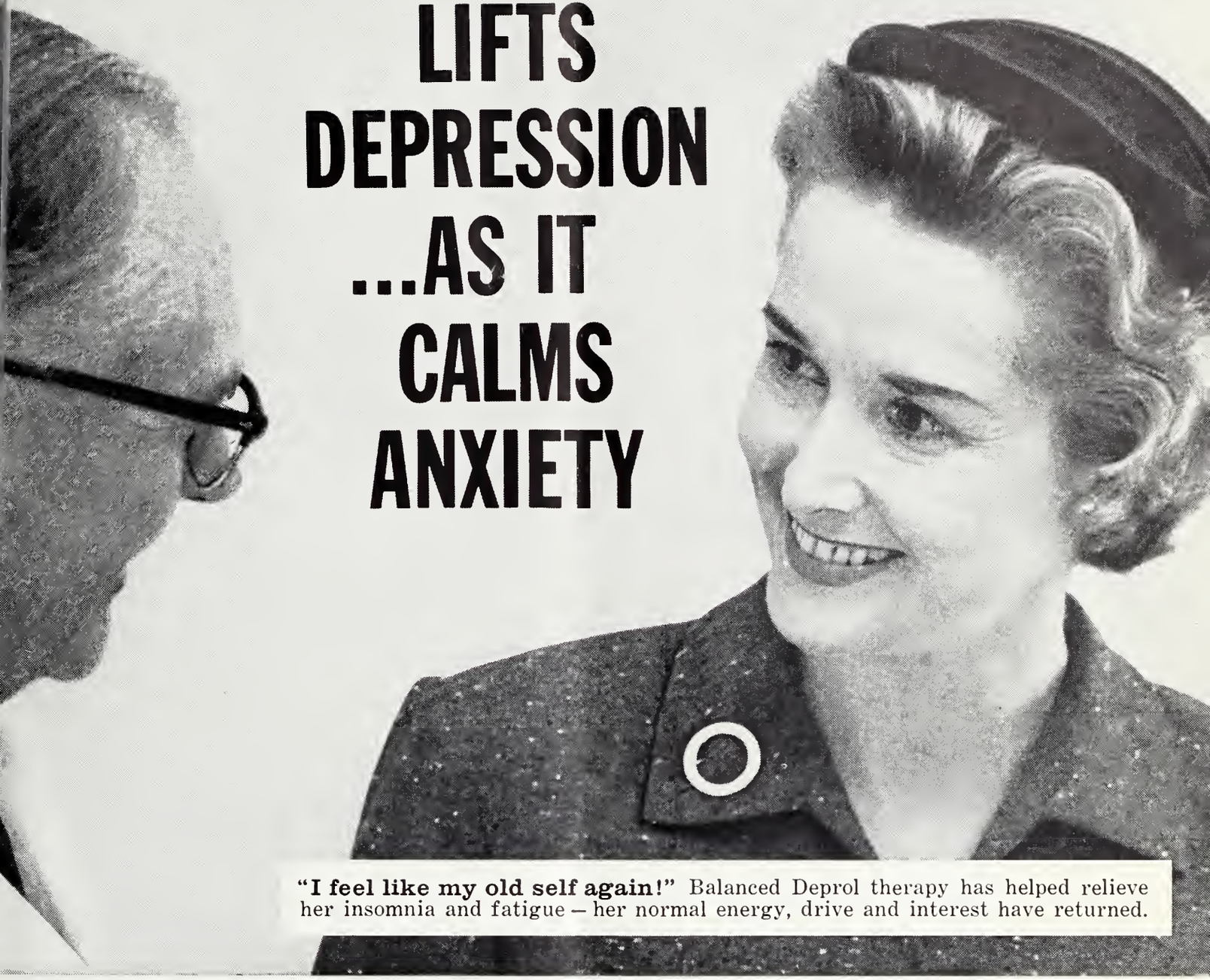
Health Insurance Use Criteria Set Out For ASIM

Point Clear - Insurance actuary R. J. Jones told a regional conference of the American Society of Internal Medicine that the patient ought to pay "a considerable portion of medical care costs." Jones told the internists that four criteria control proper use of health insurance: the loss should be infrequent; it should be of financial consequence; the loss should be beyond control of assured patient; and the amount of loss should be definite when the contingency occurs. He said insurance is at its worst when claims are small, its purpose being for larger amounts.

Hammy Hypochondriac Pooch Is PT Moocher

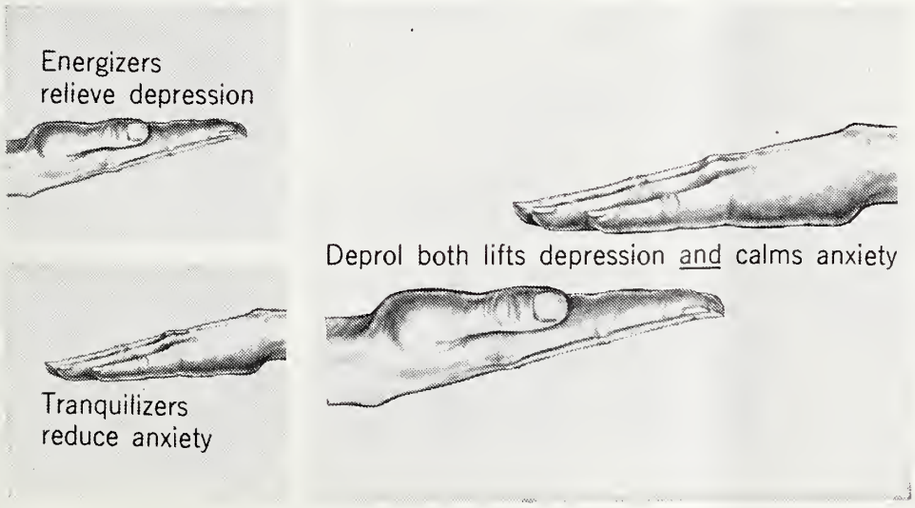
Los Angeles - Baron, a year old purebred mastiff, lost a test of strength with an auto, leaving him bruised and battered. After veterinary care, Baron's owner, Miss Betty Schon, a physical therapist, took over. Now, following complete recovery, the pooch is a PT addict, making his way to the treatment room, rolling over, and whining with faked pain, even offering a paw not injured in accident.

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AMA Poll Notes 1962 Medical Advances

The year 1962 was one of vast development in a wide field of medical sciences, a poll of the specialty sections of the American Medical Association revealed.

There may, in fact, have been several "breakthroughs," but because of the growing complexity and intertwining of medical knowledge, it could take some time to uncover these.

This was nowhere better exemplified than in the field of genetics where, in the footsteps of Drs. F. H. C. Crick, M. H. F. Wilkins and J. D. Watson, this year's Nobel Prize winners in medicine, the long-heralded breakdown of the genetic code is firmly underway. Breaking the code could be a gigantic step into the future for medicine, but first more knowledge will have to be developed.

The code, intertwined in a thread-like molecule of deoxyribonucleic acid (DNA), dictates all growth and life functions from the nucleus of every living cell.

But knowing the code is not enough. There must also be an understanding of other complex unknowns of body chemistry and such understanding will probably require more years of research.

Advances in genetics, however, were not only in the field of deciphering DNA's code. Dr. Robert Gutherie of the University of Buffalo devised a blood test to determine at birth whether an infant suffers from phenylketonuria (PKU).

Another development which may lead to a general breakthrough in medicine was the discovery of a drug capable of curing a virus disease. At the AMA annual meeting in Chicago, Dr. Herbert E. Kaufman of the University of Florida offered proof that application of the drug 5-iododeoxyuridine kills off the herpes simplex virus.

Another developing field in 1962 was that of medical transplants. The stumbling block to such operations has always been the body's refusal to accept the tissues of another person, unless that person is an identical twin. Attempts to break down this reaction by heavy radiation or extremely strong drugs have been partially successful, but such methods often produce harm.

Proof in 1962 that the thymus gland is the seat of the body's defense mechanism, which rejects transplants, triggered hope that in the not-too-dis-



tant future, manipulation of the gland and its secretions may make possible successful transplants.

New techniques also spurred advances in other fields of surgery. Specialists developed two methods of stimulating failing hearts. One process uses an electrical shock and the other uses chemical stimulaters.

There were also several methods devised to increase the flow of blood to the heart muscle. It was found that bits of spleen will take root when grafted to the muscle and thus increase the supply. Also pioneered was the diversion of a chest artery to the heart muscle.

Significant in the field of ear surgery was development of surgical means for replacing vital middle ear parts with plastic or stainless steel.

Hypothermia was given wider use by surgeons during the year, particularly when operating on vital organs such as the heart and brain. Using a hollow, needle-like device at nearly 400 degrees below freezing, Dr. Irving S. Cooper of New York City found he was able to stop the tremor and rigidity associated with Parkinson's disease, which afflicts about 300,000 in this country.

Another freezing technique, devised by Dr. Owen Wangensteen of the University of Minnesota, showed success in treating peptic ulcers. A balloon with tube attached is placed in the patient's stomach and inflated with a coolant.

Meanwhile, experiments with dogs may open the way to other surgical techniques aimed at curing cancerous organs, ulcers and other ills. It was shown that stomachs, spleens, intestines and other organs could be taken out of dogs, given radical treatment even with radiation that otherwise would kill the dogs, and reimplanted.

As in preceding years, much of the effort in drug development was directed at cancer. No one drug proved completely successful, but several, notably thio-tepa, Methotrexate and 5-Fluorouracil, may point the way toward possible breakthroughs in the field.

Some gains were noted with the use of supertoxic doses of drugs. It was found that these could be used in certain sections of the body if these sections are "tied off" from the regular blood supply and kept alive with heart-lung machines.

Another drug, Ethionamide, showed its merit in fighting tuberculosis, especially in view of the increasing resistance by the tubercle bacilli to present medications.

(Turn to advertising page 38)

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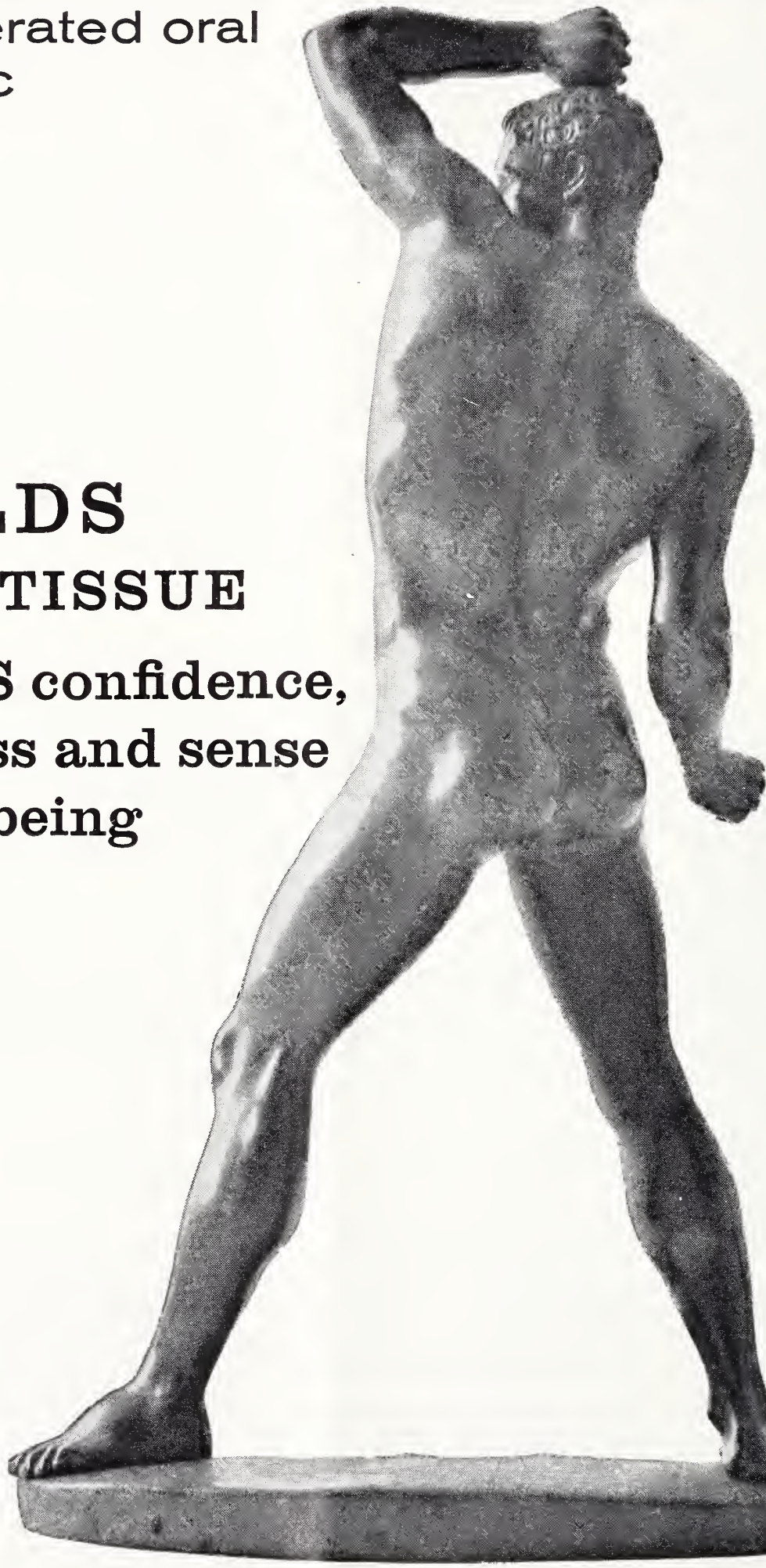
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January, 1963, Vol. IV, No. 1

ORIGINAL PAPERS

The Allergic Child: Physical Aspects of Allergic Rhinitis

WILFRED Q. COLE, M.D.
Jackson, Mississippi

The author, formerly a fellow in pediatric allergy at Duke Medical Center, Durham, N. C., reports on an analysis of 200 children with a primary diagnosis of allergic rhinitis. These patients were seen in the Private and Public Clinic at Duke Medical Center. He discusses characteristics of upper respiratory allergy in children and emphasizes the early age of onset and the physical characteristics of allergic facies.

THE DIAGNOSIS of allergic manifestations in children would seem to be strikingly simple. Often it is made spontaneously by the parents. Certainly this applies to asthma in older children and often to eczema in infants. Nasal allergies, however, are often passed off as "colds" or "sinus trouble." It is the purpose of this paper to point out some of the more obvious physical signs and clinical symptoms of the upper respiratory allergies in children. Allergies in children are often multiple. While the major complaint may relate to the nose, lungs, or skin, there may be general physical signs that mark the child as allergic.

The physician seeing children is likely to have one out of every five or six patients with an allergic manifestation. The incidence of allergy in the general population has been placed at around 10 per cent. Some[1] estimate that the incidence is closer to 15 or 20 per cent. Table 1 presents the incidence in children.

Clein[5] states that 95 per cent of allergic children manifest some evidence of allergy before the age of four years. Glaser[6] reports that out of 276 cases of asthma 43 per cent began during the first two years of life and 86 per cent before the seventh year. An analysis of 200 children with a primary diagnosis of allergic rhinitis seen in the Private and Public Clinic at Duke Medical Center corresponds with these reports.

Table 2, representing data collected in the Duke study, points out the well-known higher incidence of allergies in males than in females in the first decade. Included in the analysis were 75 females and 125 males. Tables 3 and 4 show the age at first visit and the age of onset for the allergy survey. Table 3 shows that 58 per cent of the patients were seen at age six or under and about 75 per cent were seen under age nine years. Table 4 shows the age of onset of symptoms.

Ten per cent of the patients included in the study had their onset under age one year and 74 per cent at age three or under. Ninety-two per cent had the onset at age six or under. The peak incidence of onset is ages one to three years, while the

Read before the Section on Pediatrics, 94th Annual Session, Mississippi State Medical Association, Jackson, May 7-10, 1962.

peak incidence of age at first visit is ages four to six years. The five-year gap between onset and visit indicates a failure to recognize the problem as allergic, a hope that the child will "outgrow" the problem, or a last resort trial after many bot-

TABLE 1

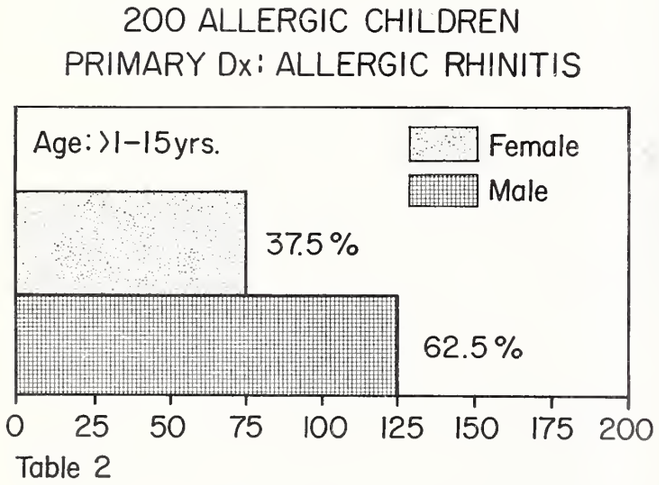
INCIDENCE OF ALLERGY IN CHILDREN

Author	*Source*	*No. of Patients*	*% Allergic*
Rapaport[2] . . .	Survey of children under 15 years	2,169	19.54
Crooke[3]	General Pediatric Practice	1,225	14-18
Dees[4]	First visit to Pediatric OPD	2,951	9 (asthma)

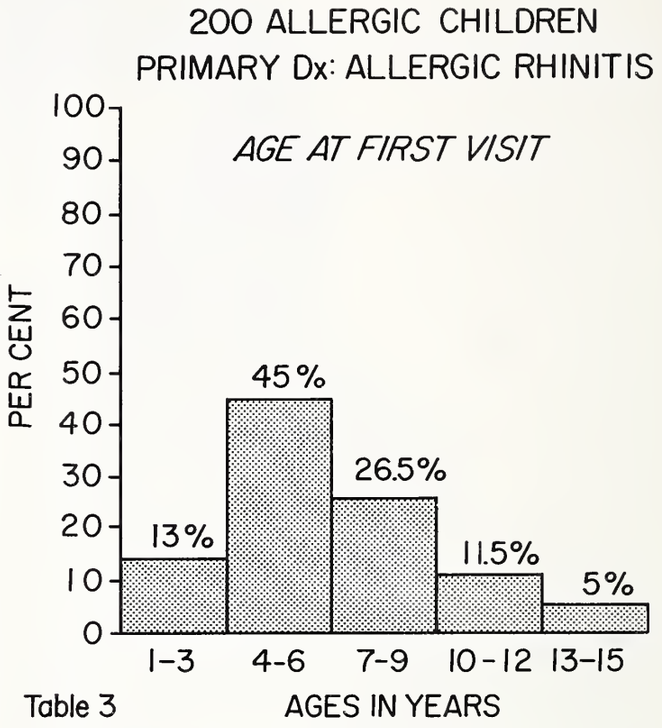
tles of antihistamines, nasal decongestants, and often a T&A have failed to relieve the symptoms.

Table 5 shows the associated allergies in these 200 children. It is noted that about 39 per cent of these children had asthma and 31 per cent had allergic rhinitis as their only allergy. The strong family incidence is emphasized in Table 6. About 90 per cent had a positive family history in one or both parents, grandparents, or siblings of the parents.

The physical appearance of the allergic child, particularly the face, is important in diagnosis. The term "adenoidal facies," familiar to all physicians, still persists, even though no mention is

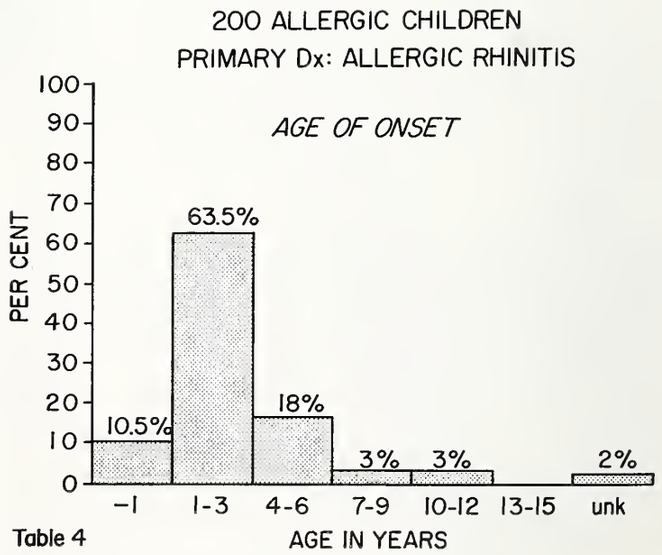


made in two of the recent textbooks of otolaryngology.[7, 8] While I can offer no statistical proof, I would say that many of these are in fact allergic facies. The appearance is characterized by flattened cheek bones, pinched appearance of the nose, and mouth breathing. Many of these children have chronic nasal allergy. Flattening of the cheek bones is from underdevelopment of the malar prominences thought due to poor development of the paranasal sinuses. The paranasal sinuses usually develop normally in spite of adenoidal hypertrophy, and nasal pathology other



than adenoidal enlargement is usually present if they fail to develop normally. The allergic face may also show the infraorbital areas, darkened areas or "dark circles." Puffiness also may be noted. These discolorations have been called "allergic shiners."[9]

In the same infraorbital area, usually extending from the inner canthial area laterally, are two fine



lines, or a wrinkle just under the lower lid margin. These are called Dennie's lines.[10] They are often, in my experience, more pronounced under one eye than the other. They are present in most allergic children from infancy through teen-age. Normal periorbital wrinkling in adults obscures their usefulness as a diagnostic sign.

Even in the absence of overt eye symptoms, most children with nasal allergy have a follicular or granular-appearing palpebral conjunctiva if viewed under magnification with an otoscopic lens.

TABLE 5

200 ALLERGIC CHILDREN
PRIMARY DX: ALLERGIC RHINITIS

Associated Allergy	*No.*	*%*
Asthma	78	39
Allergic Bronchitis	22	11
Allergic Conjunctivitis	9	4.5
Serous Otitis	11	5.5
Eczema	14	7
Urticaria	3	1.5
GL Allergy	1	.5
No other allergy	62	31

The nose will frequently show a horizontal crease about one centimeter up from the tip. This is the result of tilting of the tip of the nose upward. The various maneuvers of tilting of the nose were classically described by Bowen[11] and appropriately called the allergic salute. It is usually performed with the palm of the hand or the lateral surface of the first finger. These maneuvers are used by the

TABLE 6

200 ALLERGIC CHILDREN
PRIMARY DX: ALLERGIC RHINITIS

Family History	*No.*	*%*
Bilateral	109	54.5
Unilateral	69	34.5
Negative	14	7
Unknown	8	4

child to widen the nasal passages to allow air to pass and to relieve itching. Additional maneuvers are nose wrinkling, stretching of the upper lip down over the front teeth, the so-called "bunny nose" movements. Audible and persistent sniffing is often present. Observation of the nasal mucosae with a light shows paleness and swelling. The easily-seen inferior turbinates are swollen and mucous threads can be seen bridging the gap between the turbinate and the septum. Nasal polyps are rare in children before puberty, and if present, suggest cystic fibrosis of the pancreas.

Bowen and Balyeat[11] state that overriding incisors and V-shaped or high arched palate is five times as common in children with chronic nasal allergy. A subjective complaint referable to the mouth is itching of the palate. Itching under the chin has also been described by some patients. Walker[12] studied 60 children who had nosebleeds three times or more during a one-year period. Definite allergic disease was present in 30 per cent and developed in an additional 25 per cent within a two to five year period. Allergy is a major cause of recurrent nosebleeds in children. Figures 1 and 2 show some of these features. "Allergic shiners" are shown in Figure 1. In Figure 2, the Dennie's



Figure 1.



Figure 2.

line and wrinkle is prominent under the right eye. Flattening of the cheek bone is also present.

The question of a T&A in allergic children always comes up. In the 200 cases reviewed, 34 per cent had had T&A performed before referral for allergic work-up. Three per cent had had two or more operative procedures on the tonsils or adenoids. The procedure was recommended in 3 per cent of the patients seen. Clein[13] states that "regrowth" of tonsils and adenoids is nine times as frequent in the allergic child as in the nonallergic one. If, however, the nasal allergy is treated prior to the T&A, the recurrence rate approaches the normal 3 per cent. Glaser[6] states that upper respiratory allergy is probably present in any child who has to have tonsil and adenoids removed more than once or in any child who needs the operation before the age of three years. The indications for a T&A in the allergic child are the same as the nonallergic child. The mouth breather may have large adenoids, but his nose should be thoroughly checked before it is assumed that adenoidectomy alone will solve his problem.

In summary, some of the characteristics of upper respiratory allergy in children have been discussed. The early age of onset, and the physical characteristics of the allergic facies were emphasized. ★★★

2912 North State Street

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NEED TO KNOW

Coming in from play early one day, Johnny approached his mother with the question she had been dreading. "Mother, where did I come from," he said. Being a wise woman, she was well prepared and launched into a lengthy discussion of the birds and the bees. When she finished, she asked Johnny if that was what he had wanted to know. "Yes, I guess so," he said. "The reason I asked was that there's a new kid in class and he comes from California."

Endometrial Development and Fertility

ROBERT W. NOYES, M.D.
Nashville, Tennessee

Endometrial development is often thought to be the responsible factor when a couple is infertile, but apparently normal. The author observes that endometrial development cannot be accurately assessed unless carefully prepared standard criteria have previously been established. He discusses the obtaining and interpretation of biopsies and the use of hormones in altering endometrial responsiveness.

In the approximately 20 per cent of infertile couples in whom gross abnormalities of the reproductive organs or major aberrations in reproductive physiology can be ruled out, underdevelopment of the secretory phase endometrium is frequently thought to be the responsible factor. It is interesting and perhaps significant that overdevelopment of secretory endometrium is rarely reported.

Typically, a clinician will select the last few days of the secretory phase or, even more commonly, the first few hours after onset of the menses following a secretory phase as the proper time for taking an endometrial biopsy. His reasoning is that in order to view the endometrium at its optimum state of development, the later in the secretory phase he waits, the riper the endometrium will become.

For several reasons, however, the end of the secretory phase is not the optimum time to take an endometrial biopsy. In the first place, endometrium obtained after the onset of menses cannot be quantitatively judged for optimum ripeness, since it is extensively deranged by hemorrhage and necrosis. The most responsive areas, the surface epithelium of the anterior and posterior walls high in the uterine fundus, are desquamated very early after the onset of flow. For this reason, the endometrium obtainable with the biopsy curette is usually that of the less responsive lower uterine segment which is not really underdeveloped but is physiologically unresponsive to the full effect of estrogen and progesterone. Even if the endometrium is sampled before the onset of clinical menses, the fundal tissue is so thick late in the secretory phase that the biopsy curette frequently passes deep to the surface. The sample is consequently from the unresponsive basal layer, again resulting in underdeveloped-appearing endometrium.

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An even more serious difficulty is encountered with the problem of establishing proper standards by which to determine endometrial development. Since the endometrium changes its histological appearance each day between ovulation and the onset of menses, each of 14 histologic pictures can be assigned an arbitrary score or date. Utilizing such a system, one could observe how many endometria that appeared to be developed to day 14 corresponded with a biopsy taken on the 14th day after "ovulation." The only two clinically available indicators of "ovulation" are the shift in basal body temperature and the day of onset of menses. If these two times are designated day zero and day 14 respectively, one can then compare endometrial dates with ovulation dates. The resulting score represents the degree of endometrial development in days. Since plus or minus two days is considered the normal variation, underdeveloped endometrium can be diagnosed when the endometrial date is more than two days below the ovulation date. Both the basal temperature and the onset of succeeding menses should be used, and two biopsies should be taken in different menstrual cycles. If three of these four scores show the endometrial date to be more than two days below the ovulation date, a positive diagnosis of endometrial underdevelopment may be made. However, this is the minimum evidence for such a diagnosis.

If biopsies are taken as late as possible in the secretory phase of the cycle, this selection tends to bias any variability noted in the direction of underdevelopment of the endometrium. This statistical artifact is known as regression of observations toward the mean. It can best be explained by assuming an extreme case. If one were able to obtain 100 biopsies all on ovulation day 14, since there is no endometrial date 15 (that is, no designation for development beyond the optimum), none of the 100 biopsies could show overdevelopment of the secretory endometrium. Whatever variation the histologist would score on these 100 biopsies would be classified as 13, 12, 11, or perhaps even lower. As a result, a good histologist might wind up with about 80 per cent of biopsies diagnosed as normal, but the remaining 20 per cent would by necessity be classified as being relatively underdeveloped. This is not a fault limited to the system of "endometrial dating" using 14 scores, but is a problem common to every method of quantitative evaluation of endometrial development.

BIOPSIES

In order to avoid the above difficulties, endometrial biopsies should be taken at about the middle of the secretory phase of the cycle, on or about the seventh postovulatory day. This is also a physiologic time since it is believed that the ovum implants on about the seventh day after ovulation, and the histologist might be said to be looking with a "blastocyst's eye view" at the endometrium at this stage of the cycle. There is little chance of disturbing an implantation at this time, particularly if one delays in taking the endometrial biopsy until a patient has been studied for several months. Ideally, the tissue should be placed in Bouin's fixative and studied by the pathologist and the clinician together. If these precautions are followed, it will be found that the condition known as underdevelopment of the secretory endometrium is quite uncommon—certainly no more common than overdevelopment of the endometrium.

ENDOMETRIAL RECEPTIVITY

It is tempting to try to alter endometrial responsiveness by administering hormones to infertile patients. If one wishes to improve endometrial receptivity before implantation, the hormones must be given after ovulation and before the seventh postovulatory day. Both estrogen and progesterone will inhibit ovulation if given before mid-cycle. In a recent study it was shown that progesterone alone, given in large doses between the time of ovulation and the middle of the secretory phase of the cycle, did not alter endometrial histology or the activity of glycogen or alkaline phosphatase stained histochemically. Estrogen significantly *reduced* the rate of endometrial development, and chorionic gonadotropin advanced endometrial development slightly.

UNDERDEVELOPMENT

Experimental work with animals seems to indicate that relative underdevelopment of the endometrium is a far safer environment for fertilized ova than is overdeveloped endometrium. The experiments were carried out in rats, mice, and rabbits during the secretory phase of the cycle. Fertilized ova were recovered from donor animals at a stage when they were ready to implant. When such ova were transferred into the uteri of recipient animals in which the endometrium was relatively underdeveloped, the ova were able to implant. On the contrary, when mature ova were transferred into endometrial cavities that were relatively overdeveloped, the eggs did not implant and were very quickly destroyed.

This result would suggest that since relative underdevelopment of the endometrium is less toxic to developing eggs than overdevelopment, clinicians should have relatively little concern over the clinical entities known variously as the hypoluteal state, lutein deficiency, and immature progestational endometrium. Similarly, if any hormone might help, it would be estrogen, rather than progesterone. Unfortunately, estrogen also has a tendency to cause increased tonus of the interstitial portion of the oviduct and may prevent passage of the developing ovum into the endometrial cavity. The possible beneficial effect of estrogen on the endometrium would then be lost. However, estrogen therapy between the time of ovulation and implantation is worthy of extensive clinical trial with various doses of several compounds.

SUMMARY

In conclusion, the following points relative to endometrial development seem to be of clinical importance. Endometrial biopsies should be taken at about the middle of the secretory phase of the cycle, and care should be taken that the curette is passed to the top of the uterine fundus and withdrawn gently so that the tip of the curette does not sample just basal endometrium. The tissue should be fixed immediately in Bouin's fixative and should be examined after sectioning by pathologist and clinician together.

Endometrial development cannot be assessed unless carefully prepared standard criteria have previously been established. The best developed areas of endometrium are more closely correlated with the time of ovulation than is the average or composite picture of endometrial development. No attempt should be made to assess the development of endometrium with fibrous stroma (lower uterine segment endometrium), or that showing polypoid or inflammatory reactions. Underdeveloped endometrium should appear to be at least two days behind the standard on at least two successive biopsies taken during different menstrual cycles. Both the shift in basal temperature and the day of onset of the menses following the biopsy should be used as chronological guides for estimating endometrial development. Estrogen, rather than progesterone, would appear to be a logical hormone to improve endometrial responsiveness in the apparently normal but infertile couple. ★★★

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EXASPERATING EXITS

Each week, Missouri's Governor John M. Dalton sends a newsletter to key constituents. A recent edition listed some of the causes of death that turned up in vital statistics records from locally prepared death certificates:

"Went to bed feeling well but woke up dead."

"Don't no. Died without the aid of a physician."

"Blow on the head with ax. Contributory cause—another man's wife."

"Died suddenly, nothing serious."

"Deceased had never been fatally sick."

"Deceased died from blood poisoning, caused by broken ankle, which is remarkable, as the automobile struck him between the headlight and radiator."

Acute Surgical Abdomen

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Abdominal diseases requiring immediate operation may be arbitrarily divided into four classes: inflammatory, perforating, hemorrhagic, and obstruent. The author discusses diagnostic features of some of the more common conditions in these categories. He emphasizes proper preoperative preparation of the patient and comments on treatment.

CONFRONTED WITH THE ACUTE surgical abdomen, the surgeon must decide if operation is necessary immediately or can be delayed without harm to the patient.

The diseases considered in this paper require emergency operation. However, this does not mean that proper preoperative preparation of the patient is to be omitted. For example, fluid and electrolyte replacement may be necessary, and certain laboratory procedures may be required before surgical intervention. Only the more common abdominal illnesses will be included in this discussion.

Abdominal diseases requiring immediate operation may be arbitrarily divided into four classes:

I. Inflammatory
II. Perforating
III. Hemorrhagic
IV. Obstruent

INFLAMMATORY LESIONS

Acute appendicitis is by far the commonest inflammatory lesion found in the abdomen. The diagnosis of appendicitis would be correct in many cases on the basis of probability alone. Typical appendicitis is easy to diagnose; it is the atypical case with its many variations that causes difficulty.

Although right lower quadrant pain may be produced by other diseases of nonsurgical nature, the discomfort of appendicitis is one of the few abdominal pains that begin without prodromata. It is usually continuous and severe, but rarely requires narcotics. The pain is steady, sometimes with intermittent exacerbations. Between exacerbations, there is a constant ache which is worsened by movement or walking. The pain generally begins in the epigastrium or the periumbilical region and later localizes in the right lower quadrant.

There is anorexia and occasionally vomiting. Constipation is common and diarrhea the exception. Rectal temperature rarely exceeds 101° F unless the inflammatory reaction is advanced or early peritonitis exists. As inflammation progresses, an adynamic ileus is produced, with decreased bowel sounds and mild abdominal distention.

Second only to pain as a diagnostic factor is right lower quadrant tenderness. Rebound tenderness will be present only if there is enough peritoneal involvement to produce effusion. The leukocyte count will rise with the spread of inflammation, but will be under 12,000 in approximately 50 per cent of the cases. The elevated count merely corroborates the diagnosis and is not a criterion. The diagnosis of acute appendicitis must not depend on the blood count.

The treatment of acute appendicitis is appendectomy.

Meckel's diverticulitis generally produces the same signs and symptoms as acute appendicitis. However, a certain number of cases will be manifested by acute intestinal obstruction because of the peculiar attachment between the mesentery and the anterior abdominal wall. Unless the patient is known to have Meckel's diverticulum, the diagnosis is rarely made before operation.

Treatment consists of removal of the offending lesion.

Acute cholecystitis may require an emergency cholecystectomy in certain cases, but in general it is not a surgical emergency. However, this is still a controversial problem.

Acute cholecystitis is caused by obstruction to the cystic duct trapping the bile in the gallbladder and causing irritation and inflammation of the mucous membrane. This inflammation is primarily chemical, and the role of bacteria is secondary.

Pain in the right upper quadrant of the abdomen is characteristic of acute cholecystitis. It is usually

gradual in onset, but sudden if it is due to a stone in the cystic or common duct. The pain is severe and constant with peaks of intensity. Vomiting is variable, nausea is intense, and the temperature rise, generally, is two to three degrees.

Abdominal exploration must be considered when these symptoms continue unabated after conservative therapy has been instituted. This is especially true if a tense, tender gallbladder is palpated, for rupture occurs in approximately 10 per cent of the cases of acute cholecystitis. The treatment is removal of the diseased organ with or without drainage depending on the undividual case.

PERFORATING LESIONS

Diseases in this category have a sudden onset of pain followed by rapidly spreading abdominal discomfort and tenderness, secondary to the peritonitis produced.

Ruptured peptic ulcer is probably the most common perforating lesion of the abdomen. Approximately 90 per cent of these patients have a history of previous gastric disturbances suggestive of peptic ulcer. The so-called "pain, food, relief syndrome" with the pain relieved by food and alkali with recurrence of pain within one to two hours, is practically diagnostic.

At the time of perforation the sudden outpouring of gastroduodenal contents into the abdominal cavity produces a dramatic clinical picture. The signs and symptoms are generally so unmistakable that the diagnosis of perforation is seldom missed. The most characteristic feature of the perforation is the sudden onset of agonizing epigastric pain. Many patients can recall exactly what they were doing at the time the pain occurred. This pain is thought to be the result of pylorospasm induced by peritoneal irritation. Approximately 20 per cent will have shoulder pain due to phrenic radiation from irritation of the diaphragm. There is little diagnostic significance to nausea and vomiting since they are inconstant.

The patient usually exhibits a picture of severe prostration. However, there is little change in temperature, pulse, or blood pressure, that is, the picture of shock does not exist. The difference between these two clinical pictures should be accurately noted. The patient has an anxious appearance, the skin is wet with perspiration, the respirations are shallow and rapid. The abdomen is held rigid and is absolutely unyielding. It probably deserves the term "board-like rigidity." There is generally a disappearance of peristaltic sounds.

If a sufficient quantity of air or gas has escaped by way of the perforation, the "liver dullness" is obliterated and pneumoperitoneum exists. The presence of free intraperitoneal air in a patient with antecedent gastric disturbance and evidence of diffuse peritonitis establishes for practical purposes the diagnosis of a ruptured peptic ulcer. Pneumoperitoneum can be depicted radiologically in approximately 80-90 per cent of these patients. However, the visualization of free air merely indicates that there has been a perforation of the hollow viscus, and the x-ray findings must be considered along with the history and physical examination to determine the site of the rupture. The absence of air under the diaphragm by no means rules out a perforated ulcer.

The treatment of perforated duodenal ulcer, or perforated gastric ulcer, will depend on the age and condition of the patient at the time surgery is carried out. Primary closure of the perforation may be the only procedure possible if the patient is debilitated, elderly, or in otherwise poor operative condition. In the younger, more robust individual, the treatment of choice for perforated ulcer about the duodenum and lower portion of the stomach is a subtotal gastric resection with the removal of the ulcer area and a major portion of the acid-bearing glands. Generally, an end-to-side gastrojejunostomy of the Polya modification will suffice.

Perforation of the large bowel must be differentiated from perforated peptic ulcer. This is marked by the sudden onset of intense, diffuse abdominal pain, diffuse tenderness with positive rebound tenderness, absence of bowel sounds, and prostration. X-ray evidence of pneumoperitoneum aids in establishing the diagnosis, but it is not always possible to determine which organ is perforated.

Rupture of a gastric ulcer or a gastric carcinoma generally produces the same signs and symptoms as perforated peptic ulcer of the duodenum.

Rupture of a sigmoid diverticulum is probably the commonest cause of perforation of the colon. Carcinoma ranks second, and there is no way to distinguish between the two. However, the patient with diverticulitis usually has a rather lengthy history of bowel distress with previous episodes of left lower quadrant pain, and alteration of bowel habits, usually diarrheal in nature. He may or may not have undergone x-ray examination to reveal the presence of diverticuli.

Most diverticuli are located within the sigmoid colon. A patient with diverticuli of the colon usually falls into the pattern of the so-called "left-hand appendicitis" in which there have been recurring episodes of abdominal distress with pain localized in the left lower quadrant and alteration of stool habits. This history may cover a period of several years.

At the time of rupture of the sigmoid diverticulum, the pain is sudden in onset and is agonizing.

It will generally produce a certain degree of prostration and will be accompanied by spreading abdominal tenderness. Usually, there is enough gaseous material within the colon so that the escaping gas will present a picture of pneumoperitoneum if an x-ray is taken in the upright position.

The treatment of a ruptured diverticulum of the colon depends primarily upon the degree of pathologic change encountered at the time the abdomen is opened. If the diseased segment of the bowel is relatively small, it is best to excise the affected area and do a primary end-to-end anastomosis of the colon. The matter of a cecostomy is left to the discretion of the operating surgeon. If only a small perforated diverticulum is encountered, it may be possible to do an elliptical incision about the base of the diverticulum and close the defect primarily.

However, if a large area of edema, induration, and adhesive formation is found, primary resection may be an impossibility. The surgeon must then content himself with draining the area. He should institute the proper medical regimen and defer resection until the patient's condition has improved and the inflammatory reaction has subsided. The general condition and age of the patient must be considered in the treatment of the illness.

HEMORRHAGIC DISEASES

Ectopic pregnancies nearly always produce some kind of menstrual irregularity or abnormal uterine bleeding. Approximately 50 per cent of the cases will have amenorrhea followed by bleeding, but it must be emphasized that there is no characteristic type of menstrual irregularity. Generally, a patient will miss a menstrual period, and approximately two to three weeks later there will be an onset of bleeding. Sometimes there may be the onset of a menstrual period with the prolongation of bleeding that will become almost continuous.

The pain in an ectopic pregnancy is produced by the stretching of the affected tube, and the amount and severity of the pain depends on how rapidly this process develops. It must be emphasized that a ruptured ectopic pregnancy does not occur without pain. In fact, the onset of the pain is usually of severe nature and is sudden in onset. Generally the patient is exerting herself in some manner so as to increase intra-abdominal pressure when the pain begins. The evacuation of the lower bowel and urinary bladder tends to aggravate the condition. As the bleeding process continues, the abdominal tenderness extends across the lower abdomen, and the increasing hemorrhage causes the usual symptoms of blood loss, such as dizziness, weakness, and fainting.

Approximately 25 per cent of the patients are in some degree of shock when seen by the examining physician, and the hematocrit evaluations show a decrease in volume of packed cells. Varying degrees of shock are found in these patients. In general, the pulse is increased; the blood pressure somewhat lowered, and there is a bulging of the posterior cul-de-sac, indicating fluid of some nature. The pain is consistent and is spread across the entire lower abdomen.

Cul-de-sac punctures, laboratory determinations of hematocrit, hemoglobin, and red blood count may be of diagnostic value. If the condition of the patient warrants, an emergency frog test examination for pregnancy may be done while the patient is being treated and observed. The frog test will be positive in approximately 75 per cent of the cases. Obviously, the longer the duration of the pregnancy before the rupture, the greater the probability that the test findings will be correct.

Probably the most important diagnostic procedure is the needle aspiration of blood from the cul-de-sac. It is a simple procedure which can be easily done and will be positive in approximately 95 per cent of the cases. The main criticism of this procedure is the possibility of withdrawing blood from one of the pelvic veins. However, it is to be remembered that blood withdrawn from a vessel will clot whereas blood drawn from the cul-de-sac following a ruptured ectopic pregnancy usually will not clot.

The treatment of this condition consists of fluid and blood replacement followed by abdominal exploration with removal of the ruptured oviduct and the products of the rupture.

Traumatic rupture of the spleen presents a triad picture consisting of abdominal pain, tenderness, and evidence of hemorrhage. Of course, the severity of these signs is directly related to the amount of hemorrhage and whether the hemorrhage is into the peritoneal cavity, into the spleen itself, or into the retroperitoneal space.

The classical type of ruptured spleen is that with free bleeding into the peritoneal cavity. There is massive hemorrhage with all the signs and symptoms of an acute blood loss, that is, generalized abdominal pain and tenderness, rapid pulse, decreasing hematocrit, decreasing red blood count, and signs and symptoms of progressive shock. Physical signs will show abdominal tenderness, chiefly located over the splenic area, and dullness in the left upper quadrant produced by the hematoma which surrounds the spleen. Occasionally, a scout film of the abdomen may show an opacity in the region of the spleen due to the hematoma. If there is air in the stomach, which there usually is, it will be noticed that this gas bubble is displaced medially. Of course, it is always important

to look for damage to the ribs overlying the spleen.

Rupture of the spleen with subcapsular or retroperitoneal hemorrhage presents a more difficult diagnostic problem than rupture of the spleen with hemorrhage into the peritoneal cavity. There may be little in the way of x-ray or physical findings except for regional pain and tenderness, which may be of moderate degree and localized in the left upper quadrant. Probably the most important physical finding will be a lowered red blood count and hematocrit which will remain depressed in spite of fluid or blood administration. When a patient has pain and tenderness over the splenic area and repeated or serial hematocrit and red blood cell determinations show a progressive fall, or the levels are not raised by repeated blood transfusions, one must strongly suspect a rupture of the spleen with subcapsular bleeding or hemorrhage into the retroperitoneal space.

The third type of rupture of the spleen is the delayed rupture. This may be due to disease or trauma. The rupture may occur over a period of time varying from two or three days to several weeks. The clinical picture will not become clear until the capsule of the spleen ruptures widely and massive hemorrhage occurs. At that time, there will be a sudden onset of signs and symptoms suggesting shock accompanied by laboratory and physical findings which indicate loss of blood. It may be pointed out that rupture of the spleen in children can easily occur without any evidence of damage to the rib cage since the ribs and cartilages are more resilient than those of an adult.

The obvious treatment for this type of injury is abdominal exploration with removal of the ruptured spleen. Adequate blood and fluids must be given to restore the blood level as near as possible to normal.

Rupture of the liver will present almost identical signs and symptoms as rupture of the spleen except, of course, the trauma may be more commonly noted on the right side of the upper abdomen or lower rib cage. Once again, signs and symptoms suggestive of hemorrhage must be recognized and investigated.

The treatment of this condition consists of abdominal exploration. The lacerated area of the liver is treated by means of primary suture of the liver or the interposition of gelfoam sponges into the bleeding area. The old reliable method of inserting pieces of fresh muscle into the laceration to be held in place by liver sutures is still a good one.

Upper gastrointestinal hemorrhage may be caused by approximately 50 conditions. However, from the standpoint of probability, the cause in about 75 per cent of the cases is an ulcerating lesion of the stomach or the duodenum. The lesion may be either benign or malignant; however, the great preponderance are benign.

On the basis of patient study in hospital statistics, 10-20 per cent of all patients treated for peptic ulcer will have gross hemorrhage. Among these patients, an antecedent history of peptic ulcer will be found approximately 75-85 per cent of the time. Melena occurs more often than hematemesis as a sign of bleeding from the upper G.I. tract because of the high incidence of duodenal ulcer. Usually, the patient is called to the doctor's attention because of the passage of a black, tarry stool or the vomiting of blood, accompanied by weakness, dizziness, thirst, and pallor. As the hemorrhage continues, signs and symptoms suggestive of the loss of blood occur. The accompanying laboratory reports may indicate a continuous loss of blood, and the condition of the patient often worsens until it is not uncommon to see shock following a prolonged upper gastrointestinal hemorrhage.

If there is no history of a predating peptic ulcer, the diagnosis may become quite difficult, especially as to determining the site of the bleeding in the gastrointestinal tract. However, blood transfusions should be begun and an upper G.I. series obtained with "thin" barium in an effort to determine the site of bleeding.

Accurate diagnosis must be made early since emergency operation for bleeding is often the only means of preventing death. After 48 hours the operative mortality rises sharply in patients in whom the bleeding has continued and who are suffering from chronic blood loss.

Bleeding from a gastric ulcer and bleeding from a duodenal ulcer present almost an identical picture. Most surgeons believe that a patient who is bleeding from a gastric ulcer will have a greater degree of hematemesis than a patient bleeding from a duodenal ulcer. This is probably due to the action of the pyloric muscle. Some patients bleeding from a duodenal ulcer never vomit but have several tarry stools. Approximately 300-400 cc. of bleeding must occur before the usual tarry stool is seen.

The treatment of this condition consists of adequate preoperative preparation with fluids and blood transfusions, abdominal exploration, and excision of the ulcer. Fortunately, most bleeding ulcers occur in the distal portion of the stomach or the first and second portions of the duodenum. A subtotal gastric resection with a gastrojejunostomy suffices to cure the condition. If the bleeding ulcer is in the proximal portion of the stomach, a different type of procedure is obviously necessary. On some occasions, it may be necessary to do a total gastrectomy to alleviate the condition. If so, then an esophagojejunostomy is the procedure of choice

with or without an entero-enterostomy depending on the choice of the operating surgeon.

Meckel's diverticulum in children may cause repeated attacks of abdominal pain and melena and at times the bleeding may be rather copious. However, the bleeding is rarely tarry but usually is of "strawberry" nature, or bright red in color. Bleeding in this case may be massive enough to lower the blood count and the hematocrit. The mild pain which accompanies this condition helps to distinguish it from the pain and bleeding of intussusception. It may be said that any bright red bleeding noted in the stool of a child under the age of two years is bleeding from a Meckel's diverticulum until proven otherwise.

The treatment of this condition is abdominal exploration with excision of the diverticulum. Occasionally, it may be necessary to remove a portion of normal bowel with an end-to-end primary anastomosis.

Exsanguination from some type of uterine pathologic condition is one of the most critical events facing any surgeon. This may be due to uncontrollable bleeding from the vaginal vault, uterine malignancies, rupture of the uterus with a tear of the uterine artery, placenta accreta, atony of the uterus, or uncontrolled hemorrhage following other types of pelvic surgery. Attempts at conventional methods of treatment such as uterine packing, suturing, and blood transfusions are usually of no avail, and the bleeding continues unabated. When this type of hemorrhage occurs and conventional methods fail, uni- or bilateral hypogastric artery ligation may be lifesaving. This procedure carries relatively little risk, certainly less than uncontrolled hemorrhage.

The hypogastric artery arises as a bifurcation of the common iliac artery and is approximately two inches in length before it divides into an anterior and posterior branch. The vessel can be approached surgically by two means. The first method is a transabdominal approach with incision of the posterior peritoneum overlying the bifurcation of the common iliac artery. If a unilateral ligation is considered, a McBurney type of incision placed in the respective lower quadrant of the abdomen may be used. After separation and division of muscle fibers, an extraperitoneal approach to the vessel is done. There are relatively few contraindications to these procedures. There is adequate collateral circulation to the pelvic structures even after a bilateral ligation has been done. Collateral circulation is available through the ovarian arteries which arise from the aorta, branches of the inferior epigastic artery, superior hemorrhoidal artery, and the lower lumbar arteries. One must remember that if the bleeding is from the vaginal cuff following a total hysterectomy, ligation of the uterine artery may not correct this condition. The vaginal artery, in a very large percentage of cases, has a separate origin from the hypogastric artery.

It is well to remember that the uterine artery supplies blood to the uterus and it arises from the hypogastric. The vaginal artery supplies blood to the vagina, and it may have its origin from the hypogastric artery.

The hypogastric artery is doubly ligated with umbilical tape without dividing the vessel. It is not thought wise to divide the vessel for should the external iliac artery be accidentally ligated, the leg on the operative side will very quickly show signs of ischemia. The surgeon may then have to go back into the abdomen and clip the sutures which have constricted the vessel in order to preserve the limb. The femoral pulsations in the femoral triangle can be palpated at the time the ligation is done. This will often prevent a serious mistake.

BOWEL OBSTRUCTION

Age groups must be considered in bowel obstruction. In young patients, intussusception is the most common cause. In young adults, obstruction generally is a result of adhesions and hernia, and in later life, most obstructions are caused by neoplasms. There are no typical symptoms in intestinal obstruction. Practically all patients will have pain, vomiting, constipation, distention, and x-ray findings varying from the normal. Temperature and pulse rates are generally close to normal limits. Bowel sounds are active at first but gradually diminish with the abdomen becoming tympanitic.

External hernia is a well-known entity, and there is little need to review the signs and symptoms. Suffice it to say that irreducible hernias are considered an emergency. Occasionally, even though a hernia reduces, there may still be enough pathologic change of the bowel at the point of strangulation to continue to interfere with the blood supply and to endanger the vitality of the bowel even though it lies once again within the abdomen. Strangulation is a common hazard in small bowel obstructions since most of these are due to incarcerated hernia or intussusception.

Strangulation of the large bowel is not common, except in volvulus. The most common cause of large bowel obstruction is from neoplasms which produce a simple, mechanical-type obstruction. As strangulation of an intestine occurs, the pain will become severe and constant and may or may not radiate. With the formation of the irritating exu-

date, generalized abdominal tenderness will appear, and as the segment becomes devitalized, the bowel will become paralyzed and peristaltic sounds will disappear. In this later stage of obstruction, the pulse rate will increase, and onset of fever of one to two degrees becomes apparent.

Intussusception in a child generally follows the ingestion of food. The patient suddenly cries out in pain, vomits, and becomes listless. Often there is a bowel action. The character of the stool should be noted very carefully, since it will be a blood-stained mucus. If these signs are present, it is almost pathognomonic of intussusception, and surgery is imperative.

In the diagnosis of intestinal obstruction, the most important aid is the x-ray taken in the erect position if possible. Otherwise, the left lateral decubitus position is used. Under ordinary conditions, gas is seen only in the stomach or colon, and then in small amounts. If there is even a small amount of gas present in the small intestine, some obstruction to the normal intestinal flow should immediately be suspected. These points are of value since in adynamic ileus gas will be present in an indiscriminate manner in all segments of the intestinal tract.

Obstruction in the sigmoid colon, as in volvulus, will show a huge dilated vertical loop of bowel with the absence of haustral markings. In a suspected large bowel obstruction, there is no contraindication to the use of barium enemas to determine the point and, if possible, the type of intestinal obstruction.

The treatment of intestinal obstruction will depend upon the pathologic condition found at the time of surgery. This may consist of a simple releasing of the obstruction with no further procedure being necessary if the bowel is viable and peristalsis is active, or it may consist of the resection of a rather large portion of gangrenous intestine with the formation of an external fistula. Occasionally one may safely do a primary end-to-end anastomosis. If two healthy ends of the bowel can be approximated, the procedure generally consists of excision of the affected area and a primary end-to-end anastomosis of the bowel. The formation of a cecostomy is left to the discretion of the operating surgeon.

SUMMARY

Diagnostic features of the more common abdominal conditions requiring immediate surgery have been outlined. Adequate preoperative preparation has been emphasized and specific treatment discussed. ★★★

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PERMANENT CURE

A man went to the funeral home to pay last respects to a friend, who had died while on a vacation. In front of him were two little old ladies looking down at the corpse. The one said, "Doesn't Patrick look rested?" "Yes," her friend replied, "the trip did him a world of good."

Radiologic Seminar IX: Unusual Esophageal Hiatus Hernia

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ESOPHAGEAL HIATAL HERNIAS are relatively common, particularly in elderly persons and in stout individuals. Three major types of herniation have been described. The most common is the sliding hiatal hernia, with both the distal esophagus and varying portions of the stomach slipping up through the esophageal hiatus (Figure 1). Frequently the herniation is intermittent. In the paraesophageal hernia the esophagus remains in a normal position, with the stomach protruding up through the hiatus beside the esophagus. The third variation occurs in the so-called short esophagus, with the esophago-gastric junction being permanently fixed above the hiatus. Peptic esophagitis is



Figure 1. Typical moderate-sized hiatus hernia, demonstrating protrusion of gastric mucosa up through the esophageal hiatus into the thorax.

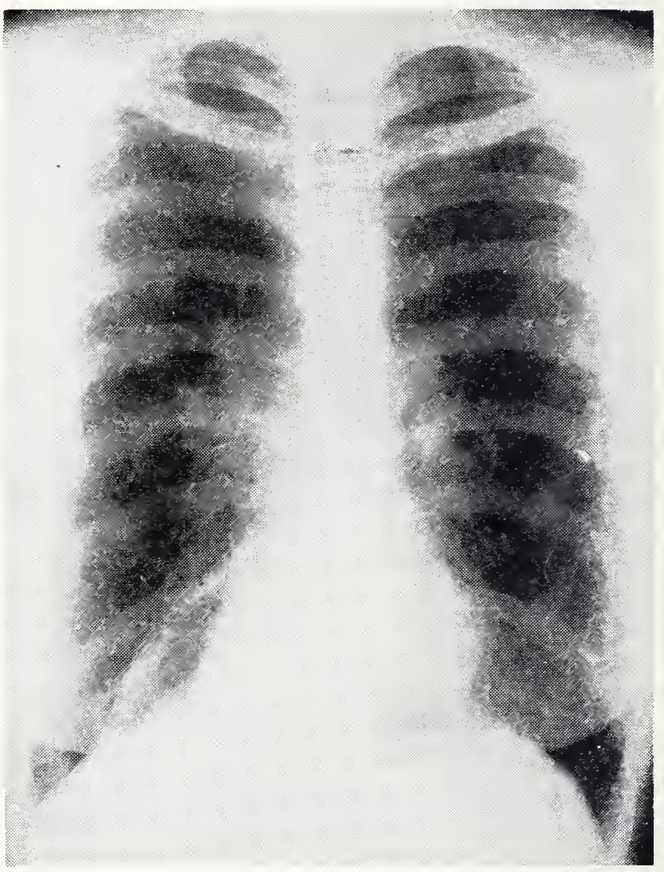


Figure 2. Routine chest film, showing the peculiar curved linear density adjacent to the right cardiophrenic angle. More commonly the intrathoracic portion of the stomach in a hiatus hernia projects to the left of the midline.

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, St. Dominic's Hospital.

thought to play a role in this apparent esophageal shortening.

The radiological diagnosis of an esophageal hiatal hernia is usually made at the time of a properly performed gastrointestinal series, but large hernias occasionally may be identified on routine chest films in the retrocardiac area.

The following is a case report of an unusual hernia, in which the entire stomach was found to be herniated into the thorax through the esophageal hiatus.

The patient, a middle-aged white female, was admitted to St. Dominic's Hospital with bilateral femoral hernias. She had had postprandial pain in the epigastric region for several weeks.

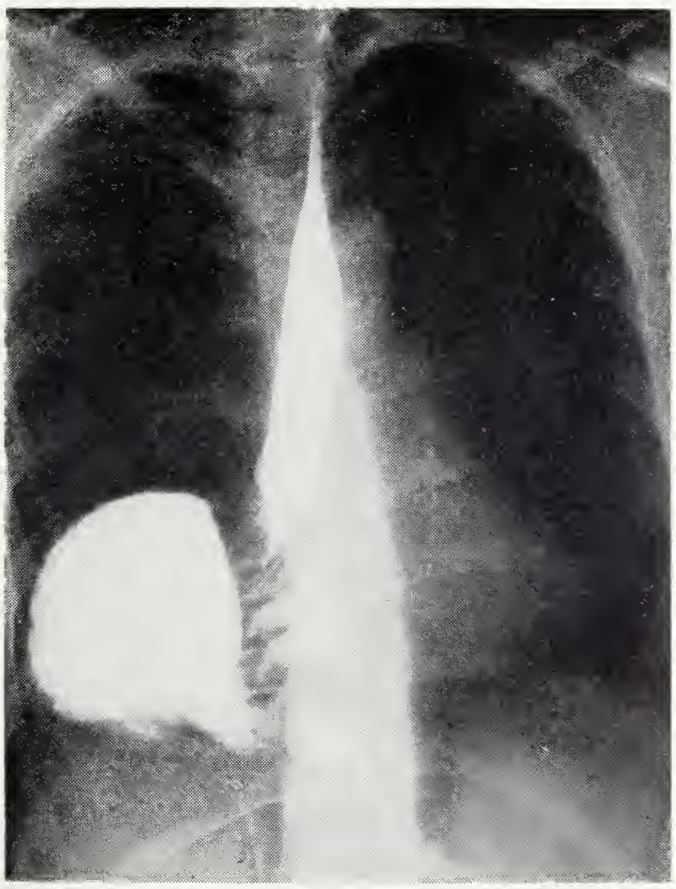


Figure 3. The entire stomach lies in the right lower hemithorax. Note that the esophagus enters the stomach above the diaphragm, permitting a diagnosis of hiatus hernia and differentiating the lesion from other types of diaphragmatic hernias.

On physical examination there was tenderness to the right of the midline in the epigastrium. A large left femoral hernia was noted, as well as a small right femoral hernia.

On the routine PA chest film (Figure 2) there was a density in the right cardiophrenic angle,



Figure 4. Same patient as Figure 3. This view shows the unusual location of the stomach and the position of the duodenal bulb and loop. The gallbladder is also shown.

which formed an arc shape with a suggestion of an air-fluid level. At the time of a GI series the esophagus was found to be shifted to the right below its midportion. The stomach was observed to be lying to the right of the midline and was within the chest in its entirety (Figures 3 and 4). On the lateral film the defect was thought to be in the mid-diaphragm, and, as the esophagus did not pass through the diaphragm, a diagnosis of hiatal hernia was thought to be the most likely.

At surgery the entire stomach was found in the chest. There was a marked enlargement of the esophageal hiatus and relaxation of all of the ligamentous structures in this area. The herniation was reduced and the hiatal defect repaired.

The fact that the esophagus did not pass through the diaphragm at any period was the clue to the correct diagnosis in this case. If the herniation had occurred through any other diaphragmatic opening, the esophagus would have passed normally through the esophageal hiatus with the stomach then passing up into the chest. ★★★

969 Lakeland Drive

Adolescence: Its Perspective and Problems

GEORGE A. CONSTANT, M.D.
Galveston, Texas

Ignored for generations, adolescent medicine has drawn concentrated interest during the last decade. In this address to Mississippi's general practitioners, the author observes that the family physician is in the best position to take care of the adolescent. He discusses problems peculiar to the adolescent and the physician's role in solving them.

STUDIES ON THE ADOLESCENT period of life, particularly the psychological and social aspects, were formerly neglected. During the past ten years there has developed both in this country and abroad an increased interest in adolescent medicine. Adolescent clinics have sprung up in an effort to fill this void. These clinics provide a genuine service by their concentrated research and studies. But it is the family doctor who is in the best position to take care of these young people. He is in this unique position because he usually knows every member of a given family and is able to evaluate the total family situation on a continuum basis. My experience as a country psychiatrist has borne this out time and time again.

Adolescents being what they are, neither adults nor children but a combination of both, are personalities who until recently have been neglected by almost everyone in the medical profession excepting the family physician. So, it is mainly up to the family doctor to take them through this developmental stage.

ADOLESCENCE PROBLEMS

What about this particular stage? Certainly, there are problems peculiar to adolescents just as there are problems peculiar to any other stage of development. Adolescents *are* different from babies and they *are* different from adults. Adolescents are more concerned about themselves than anyone else. They are concerned about their bodies, their personalities, their popularity, their schoolwork, their relationship with their parents, and their sexual maturity. Their needs and concerns are in relation to themselves. Their goal, however, is to develop into happy, mature, healthy adults with the capacity to love and work. They are urgently striving for the ultimate integration of sex and love.

The mature individual is one who has learned to accept the reality principle over the pleasure principle. He gives up his own egocentricity in order to work with others. This depends upon the development of reasoning power and the ability to love. By love, I mean the ability to be concerned about the welfare of another person.

Before an individual can love and respect others he must feel worthwhile and have self-respect. This is true not only for adolescents but for adults, too. This is a major problem for most teenagers. However, as a rule, it does not have its inception in adolescence, but goes back to infancy, childhood, and preadolescence. An adolescent has a past, too. If an adolescent's past experiences are healthy ones, his adolescence will most likely be healthy. The number one rule is to teach prospective parents and parents of all children the three A's, which have been promulgated by Dr. Leo Kanner, child psychiatrist, Johns Hopkins University Medical School. The three A's are Acceptance, Affection, and Approval.

An infant has feelings and he can sense whether he is accepted, or approved of, and loved. He must be accepted and loved for what he is and not for his achievements alone because this kind of acceptance is conditional, that is, conditioned upon whether he performed according to set standards. It is essential that parents really want their baby. He needs this unconditional love and

From the Department of Neurology and Psychiatry, University of Texas Medical Branch.

Read before the 14th Annual Scientific Assembly, Mississippi Academy of General Practice, Jackson, September 25-27, 1962.

knows whether he is getting it by the way his basic needs are met. If his needs are met by trusting, tender, and loving parents (this includes the father) he will have a sense of well-being, and he will be able to trust his own environment. This trust, once developed, will produce a feeling of optimism which may continue throughout his entire life. Children adopt the same attitude toward themselves which their parents have. They respect and trust themselves in proportion to the respect and love they have from their parents.

VERBALIZATION

What about the adolescent who has not had the advantage of the three A's? What about the boy or girl who does not feel worthwhile? Chances are he or she has a warehouse of bad feelings located in his or her subconscious and perhaps even conscious mind. The basic need here is to get rid of these feelings in an acceptable manner. If these depreciative feelings are not allowed to be expressed, they will continue to fill up the warehouse until it begins to come apart at the seams. Then look out, because actions follow feelings. Bad feelings generate bad actions. Good feelings generate good actions. It has been found that if bad feelings and thoughts can somehow be drained off, then good feelings rush in to take their place.

One of the best ways to accomplish this is to be able to verbalize or talk about one's feelings. One of the biggest difficulties we have with our teenagers is to help them talk about their problems, their gripes, their hopes, their fears, and their aspirations. By the same token, one of their biggest problems is to find someone with whom they can talk honestly. Our young people usually do not talk with their parents or any adult who is not an acceptant person. Parental ambivalence blocks healthy acceptance. At one moment parents talk about how fine and grown-up their son is and then at the next moment they cry about the fact that they are going to lose their little boy or baby. Many times the family doctor is the main confidant for the teenager.

PERTINENT SUGGESTIONS

Most physicians have techniques all their own. However, here are a few pertinent suggestions. First, be interested in him more than his disease. Second, let him tell you his history and before talking with his parents, ask his permission to do so. Then make a separate appointment (on a separate day, if possible) with his parents, to get their history. Third, listen to him, to what he says not only vocally but by his affect, his carriage, his attitude, his reactions to questions. If he is a free talker, do not interrupt him. If getting him to talk is like pulling teeth, proceed next with the physical examination. Many times the history spills out during the physical examination. When this happens, stop the physical and listen to his feelings and his thoughts. More than likely, he will communicate what's bothering him.

If this does not work, try the feed-back method. For example, if he answers questions about schoolwork with "it stinks,"—then throw it back to him gently—"it stinks?" This may get him off on a long account about some of his gripes, his bad feelings, his bad thoughts about school and possibly other areas.

Parents and grandparents should encourage gripe sessions at home. However, it must be emphasized that there is a time, place, and manner in which griping is to be done. This is necessary because there must be some control.

CONTROLS A MUST

The matter of control has been one of the most confusing issues of our time. We have been "taken in" by the free progressive school of psychology during recent years. Adolescents need and want controls and will be glad to accept them. For instance, they need to be told when they must be in at night. This gives them something to go by when they are chided by their friends to stay out later and later. The curfew must be within reasonable limits—give or take fifteen or twenty minutes.

To be workable, controls must be designed to preserve life and health, to insure property against destruction, and to respect the legal, moral, and religious codes of the community.

STOP, LOOK, LISTEN

The main thing is to take the time to see youngsters in their proper perspective and hear them out with patience, honesty, and understanding. This is especially true when it comes to sex. One of their biggest concerns is sex. Although they may be concerned about sex mechanics, they are more concerned about their sexy feelings.

What our teenagers want to know is how to manage their anxieties and feelings about sex. They want to know how to have self-respect and feel they are good boys and girls instead of bad boys and girls when sexy feelings creep over them. There has been too much confusion about feelings and actions. These must be separated because feelings and actions are two different things. If we can maintain this distinction in our own minds,

we will be better equipped to help adolescents make this distinction in theirs.

Some old concepts never die—but they should. Research has shown that the concept of telling a child that he should not feel what he feels or not want what he wants does not work. This is known as denial. Another concept known as displacement does not work either. Camouflaging feelings by calling them by a sweeter or another name is not a good substitute for placing these feelings where they belong. These feelings are there and they cannot be ignored.

How are these feelings gotten out in the open? The subject may have to be introduced by saying, "We used to think it was not nice to talk about sex or sexy feelings, but sexual matters need discussing too. They are mighty important for people of your age." At first, your adolescent may show signs of doubt in the veracity of your statements. Having wanted to talk over such matters for a long time, he may show signs of complete and pleasant surprise. On the other hand, he may become nervous, fidgety, and withdraw.

Another approach is to say you know that sex feelings are a problem when people are in their teens. Let the teenager set his own pace with respect to talking about sex. Sooner or later he will get into it. Inevitably, the big question comes up. A good answer is, "These sexual urges are wonderful feelings and they are normal and good feelings, but it is better to wait to go all the way until you are married." And here are some of the reasons:

Sex success is based on love, patience, tolerance, understanding and free communication. These have their greatest chance within the framework of marriage.

First, love is the basis for good, sexual adjustment. And love is best expressed within the framework of marriage. Even with love, most young married people need to work out a mutually satisfying sexual adjustment. Many times, this may occur from the start, but, most likely, it will take time—months, even years. Sex success is something each couple learns in marriage. At first, it might be somewhat clumsy and exasperating, but with time, patience, understanding, willingness to learn, and love above all, this relationship will grow into a mutually satisfying one.

Second, married people must be themselves fully if they are to enjoy sex fully. They must be free, comfortable, and be able to express themselves honestly and openly. This, too, is best done within the framework of marriage. They learn from each other provided their lines of communication are kept alive and open. Here, again, the bad, angry feelings must be gotten out in an acceptable manner.

Third, only within the framework of marriage are a husband and wife afforded periods of complete privacy which is another essential for sexual compatibility and adjustment.

Fourth, marriage offers a deep sense of basic security bolstered by the process of establishing a home, sinking in roots, and learning to live and work together.

Only marriage can offer husband and wife the ingredients for sex success. Love, free communication, complete privacy, and basic security provide the best atmosphere for learning the arts of love-making.

What our young people want is for us to let them know that it is all right for them to have these good feelings. At the same time, they want us to help them control their acts. They need to be able to talk with us without being afraid of being condemned. They need and want controls and will exercise them if given half a chance.

SUMMARY

In summarizing, I should like to offer the following suggestions:

1. Remember the three "A's"—Acceptance, Affection, and Approval. Practice them yourselves. Teach them to parents and prospective parents, including adolescents.

2. Remember that adolescents are different, but they respond best to the family doctor who cares.

3. Encourage griping but remember controls.

4. Do not interrupt the adolescent when he is talking.

5. Remember that the key to the emotional lock may sometimes be found during the physical examination.

6. Remember that sexy feelings and sex actions are two different things.

7. Emphasize the matter of control. It is all right to talk about sexy feelings and sexy thoughts and sexy desires but better wait for sexy acts until you're married.

8. Stop! Look! Listen! ★★★

University of Texas Medical Branch (Galveston)

Clinicopathological Conference XXXVI

Conducted by the Department of Pathology
University of Mississippi School of Medicine
Jackson, Mississippi

CPC XXXVI marks Journal MSMA's fourth year of presenting clinicopathological conferences. The Journal is especially indebted to Dr. Kenneth M. Heard, chairman, Department of Pathology, Mississippi Baptist Hospital, and Dr. Catherine G. Goetz, associate professor, Department of Pathology, University of Mississippi School of Medicine, for securing material for this department.

In this month's conference, Dr. James D. Hardy, chairman, Department of Surgery, University of Mississippi School of Medicine, discusses the case of a critically ill, 69-year-old white male, who was treated for a variety of problems. Symptomatology included sharp, cramping pains in the abdomen; persistent, diarrheal stools, and a 75-pound weight loss. Other discussers are Drs. Robert D. Sloan, Joel G. Brunson, and Thomas M. Blake.

Dr. James D. Hardy: "I must state at the outset that I knew the patient during the period he was hospitalized. He represented one of those critically ill individuals in whose case the attending physicians felt they were failing to diagnose some disease which might be amendable to therapy. However, we did recognize and treat a variety of problems in this case.

"The patient was a 69-year-old white male who 48 hours prior to admission in 1958 developed sharp, cramping pains in the abdomen. He subsequently had these attacks a number of times throughout his illness which required repeated hospital admissions. It is noted that in 1942 he had chills, fever, and jaundice which led to a cholecystectomy. I presume a common duct exploration was also performed at this time since the chills, fever, and intermittent jaundice represent Charcot's triad of biliary tract obstruction by stones.

"During the course of various admissions to University Hospital it was recorded that the patient had begun to have persistent, foul, floating, sprue-like, diarrheal stools, 4 to 8 per day and occasionally as many as 16. He gradually sustained a 75-pound weight loss, and when I saw him in consultation he was emaciated. On the medical service an upper GI and small bowel series revealed no abnormalities other than multiple diverticula of the duodenum and proximal small bowel, and a barium enema revealed multiple diverticula of the colon. Many laboratory studies were performed but were not considered to be diagnostic of specific disease. The glucose tolerance curve was somewhat flat, and he had no free gastric acid even after histamine stimulation. The electrocardiogram revealed intermittent atrial fibrillation.

"At this point a flexible instrument was introduced by mouth and a duodenal mucosal biopsy was obtained in an effort to diagnose the cause of the malabsorption syndrome which appeared to exist. No diagnostic evidence was obtained, but unfortunately the bite of the biopsy was taken inside one of the duodenal diverticula, resulting in perforation and localized peritonitis which necessitated laparotomy.

"The diarrhea was controlled with the usual antidiarrheal treatment, and the patient was discharged on a low residue and high protein diet, meprobamate, and multivitamins. Unfortunately, he had a gradual recurrence of abdominal symptoms, and was again admitted to the medical service in January 1961. At this time rates of intestinal absorption for both oleic acid and triolein were measured by the Radiology Department using tagged materials. Absorption rates for both these compounds were diminished, as reflected in

a slow rise in blood radioactivity. Thus the slow absorption of the presplit oleic acid reflected impaired absorptive capacity per se, whereas slow appearance of the more complicated triolein reflected impaired (pancreatic) digestion as well. To improve digestion, pancreatin was subsequently administered orally. For this or other reasons, the diarrhea subsided, and he actually gained 4 pounds. Now, ordinarily, one would not consider a 4-pound gain significant, but such a gain in this man was an achievement of considerable proportions. A month later, at home, he fell and sustained a right intertrochanteric fracture, doubtless reflecting in part the osteoporosis secondary to prolonged malnutrition."

PHYSICAL EXAMINATION

"On the final admission we found a chronically ill, thin, weak, dehydrated 69-year-old white man. There was evidence of partial small bowel obstruction, and the atrial fibrillation had become more or less continuous. Exploratory laparotomy was performed, and a six-inch segment of ischemic small bowel was resected. The apparent degree of the ischemia was not clearly stated, and, of course, bowel ischemia can range from cyanosis to gangrene. Postoperatively the patient convalesced normally for a day or so, but, soon after being fed a full liquid diet, he complained of severe abdominal pain. Six hours later he went into shock, and the abdomen exhibited board-like rigidity and absent bowel sounds.

"Such findings usually indicate peritonitis. There is almost never a question of widespread peritonitis if the abdomen is soft and nontender. Tenderness and rigidity are due to irritation of the parietal peritoneum which is innervated by somatic or spinal nerves, whereas the visceral peritoneum overlying the bowel is innervated by sympathetic nerves. Thus the deep, hard-to-localize and boring pain of intestinal obstruction and distention is mediated by the sympathetic nerves, while the acute pain of subsequent bowel perforation would be mediated by the spinal nerves of the parietal peritoneum. But to recapitulate, if the patient has a soft abdomen, free perforation of a hollow viscus has probably not occurred, and conservative management may be continued if such appears indicated.

"In any event, the severe abdominal pain and circulatory collapse which our patient sustained strongly suggested leakage from the intestinal tract, and exploratory laparotomy revealed perforation at a site where a denuded area of the bowel had been oversewn at the operation several days previously. I was not present at either operation, but one would suspect that even if he had sustained a serosal laceration, the bowel may have been quite thin and therefore difficult to suture securely. It is also unlikely that the mucosal biopsy, performed per os months previously, would have resulted in perforation had not the bowel wall been abnormally thin.

"Postoperatively the patient was treated with the usual supportive measures of parenteral fluids, intraperitoneal antibiotics, and Solu-Cortef and was digitalized. Surprisingly, he remained comatose even though he had not had a degree and duration of hypotension sufficient to produce brain damage in the usual case. Thus we believed that there were unusual factors in the case that had never been adequately explained. I saw him in consultation and had the feeling that some type of more effective measures ought to be possible, but none were forthcoming. Adrenocortical steroid replacement was used on this and various other occasions, since his asthenia and profound weakness suggested the possibility of adrenocortical insufficiency.

"Basically, I felt that the man died from some chronic and undiagnosed form of intestinal insufficiency. It could have had a pancreatic element in that he did not have enough pancreatic enzyme to digest his food normally, but I think it more important that he may have had some peculiar defect in absorption. He did have many diverticula, and these may have reduced absorptive function to some extent. However, it is possible that absorption proceeds normally in an unobstructed diverticulum and, if so, diverticula may actually increase the total absorptive surface of the mucosa. The patient appeared gradually to starve, with the common complications of cardiac rate changes, impaired resistance to infection, and osteoporosis.

"May we see the radiologic studies at this point?"

RADIOLOGIC STUDIES

Dr. Robert D. Sloan: "During the several years the patient was followed at the University Hospital a large number of radiologic studies were obtained. To begin with, the femoral fracture appeared to be a straight forward traumatic fracture, without evidence of any pre-existing localized pathology at the fracture site. It was treated as indicated with what appears to be a good result. A chest film at the time of his original admission in 1958 appeared normal except for some element of emphysema. At the time of the iatrogenic duo-

denal perforation, the chest films revealed some pulmonary pathology; the pattern could be compatible with either a pneumonitis or infarcts. The last chest film was obtained ten days before death. It was a recumbent study on which no gross pathology was demonstrated.

"During the time he was followed multiple GI series were obtained. Several duodenal diverticula were present, including a good-sized one on the outer curvature aspect of the descending limb. It was postulated that the biopsy forceps entered this diverticulum and that the biopsy itself perforated the wall. It would, of course, be much easier to perforate the thin wall of the diverticulum than it would a duodenal wall of normal thickness. Multiple diverticula were also noted along the course of the mesenteric small bowel, the small bowel pattern otherwise appearing grossly normal. The GI series obtained after the duodenal closure reveals that the diverticulum along the outer curvature is no longer present, and presumably it was closed at the time of surgery. As indicated in the protocol there were multiple colonic diverticula. The final abdominal films, taken when he came in with the apparent obstruction, revealed some gaseous distention of the intestine, but the pattern was nonspecific."

TERMINAL EPISODE

Dr. Hardy: "Thank you, Dr. Sloan. In my opinion the terminal episode represented peritonitis from which the patient never fully recovered. But as I said, he rather inexplicably was semicomatose for many days preceding death from hypostatic pneumonia. The underlying or basic cause of death I consider to have been a sprue-like syndrome affecting intestinal digestion and absorption and leading in effect to chronic starvation. Various diseases affecting the anatomic structure of the villi of the small intestine have been described, and in some of these, absorption has been deranged. The small bowel has received relatively little research attention from surgeons in the last few years, largely because the heart and homotransplantation of tissues have claimed the time and money. However, when one attends a patient who dies as this man did, it is apparent that improved diagnostic and therapeutic methods relative to the small bowel must be devised."

AUTOPSY REPORT

Dr. Joel G. Brunson: "I agree there are numerous names that one might apply to small bowel diseases of this type. I think that this patient had a malabsorption syndrome—whatever that means. I also think that the etiologic basis of these diseases will have to wait further enzymatic studies because they probably reflect a defect in certain cellular mechanisms rather than anything gross that can be revealed by light or electron microscopy at the moment. At any rate, it is probably malabsorption syndrome, without a definite flattening or blunting of the villi as described by Perez-Santiago.[1]

COMBINATION OF CAUSES

"The death of this patient is apparently due to a combination of causes. In addition to his chronic disease, he had multiple pulmonary emboli. There was a small embolus in a branch of the left pulmonary artery with an infarction, and a relatively large embolus in the right pulmonary artery which extended down to the right lower lobe. I believe this may have been the terminal event. In addition, he had gram-negative bacteremia and shock, and both Pseudomonas and Aerobacter were cultured from the blood stream postmortem.

"As a consequence of this infection, he had complications referable to the endotoxin. Finally, there is evidence that he had a rather severe degree of cardiac failure with marked pulmonary edema and marked hepatic and splenic congestion.

"As far as the gram-negative bacteremia is concerned, there are one or two interesting lesions. The adrenals were enlarged grossly and were hemorrhagic at the time of the postmortem examination. They appeared to be surrounded by blood and on section this extended throughout the substance of the adrenal glands, being a little more marked in the medullary portions. One can only speculate about the extent of disruption of function in glands such as these. It may have been one of the important factors in leading to his demise. In other areas of the adrenal there is an indication that ischemic necrosis has occurred. It would appear that this may have been a complication of his infection, since this lesion occurs in animals given endotoxin intravenously in conjunction with the administration of certain high molecular weight acidic polymers. The source of this polymer, if it exists in humans, is a matter of much discussion. Some investigators believe that it comes from lysis of the white cells and that these in turn release granules which may produce a rather peculiar polymer. The latter then produces changes in blood vessel walls, leading to hemorrhage, and in some areas coagulation leading to a hyaline type of thrombus.

CPC / University of Mississippi

"Going back over this case from a pathologic point of view, it is somewhat difficult to put the whole thing together. He did have multiple diverticula of the large bowel, which have already been described, but the anastomoses were intact and there is no evidence of old or recent peritonitis. There were some fibrinous adhesions between the loops of bowel at the site of recent surgery, but no evidence of frank peritonitis. His heart weighed 330 gm. It showed a marked serous atrophy of the pericardial fat and the pericardial cavity contained about 100 ml. of straw fluid. There was no evidence of coronary atherosclerosis and not much evidence of aortic atherosclerosis. The kidneys were slightly enlarged and showed evidence of active severe pyelonephritis. I believe this may have been, in addition to the bowl, another source for gram-negative bacteremia. I have already mentioned the adrenals.

SKIN CHANGES

"At the beginning of the postmortem examination, our prosector was impressed with the degree of dryness and scaliness of the skin of this individual and made a specific remark that the skin was quite brittle and did not cut like normal skin. On further examination statement was made that the thyroid gland was not palpated. At the time of dissection the thyroid gland could not be definitely identified. Multiple blocks were taken from the region where the thyroid should be. Microscopically, we have found thus far only one minute nodule of thyroid tissue; most of the organ has been replaced by heavy scar tissue. So I believe this patient had myxedema in addition to malabsorption syndrome, or possibly related to its development. Further evidence of myxedema is the fact that he had cardiac failure without evidence of anatomic cause, without atherosclerosis of the coronary arteries and without valvular lesions.

"As to the cause of myxedema, I think this is a matter of speculation. One can only wonder whether administration of radioactive iodine contributed in this regard or whether this is one of the unknown cases of myxedema caused by "idiopathic" atrophy of the thyroid gland. In looking over his chart I find that the atrial fibrillation commenced after the administration of the radioactive iodine. I don't know whether it was coincidence or whether this may have played a role in the development of myxedema in this patient. Perhaps Dr. Sloan would care to comment on this. Are there documented cases in which this has occurred?"

Dr. Sloan: "I am not aware of the dosage used in this case."

Physician: "What happens to the thyroid gland in starvation?"

Dr. Brunson: "As far as I know it does not undergo a complete atrophy. There may be large follicles with heavy staining colloid, but nothing to suggest complete atrophy of the gland. Dr. Blake?"

SUMMARY

Dr. Thomas M. Blake: "I can't help but comment. Retrospectively the EKG's do go along well with something wrong with the thyroid and also something wrong with the pericardium. His EKG was normal in 1958 and this present atrial fibrillation is something that we needn't get involved with. However, towards the end his EKG showed a very slow rate and very low voltage. The diminution of the size of the deflections developed during the course of his illness. This means that something developed to interfere with conduction of the electrical impulses somewhere between the myocardium and the recording. Myxedema is one cause for such interference, pericardial effusion is another, skin changes another. There are various possible explanations, but slowing of the rate plus the lowering of the voltage goes along well myxedema."

Dr. Hardy: "May I read from the record? It says, in answer to a specific question, that ichthyosis may be associated with low voltage of the complexes. In other words, can changes in EKG voltage be caused by changes in the skin itself, either its composition or its thickness?"

Dr. Blake: "Yes. We rub the skin with electrode jelly to try to reduce its resistance to a standard minimum, but skin diseases can change this."

Dr. Hardy: "Atrial fibrillation is not a common accompaniment of myxedema; rather it is far more often found in thyrotoxicosis."

Dr. Brunson: "This patient had compound disease: starvation, anemia, pyelonephritis, thyroid atrophy, malabsorption syndrome, pulmonary emboli, and gram-negative bacteremia with adrenal hemorrhage." ★★★

2500 North State Street

REFERENCES

1. Butterworth, C. E., and Perez-Santiago, E.: Jejunal Biopsies in Sprue, Ann. Int. Med. 48:8 (Jan.) 1958.

MEETINGS

NATIONAL AND REGIONAL

American Academy of General Practice, April 1-4, 1963, Chicago, Ill. Mr. Mac F. Cahal, Executive Director, Volker Blvd., at Brookside, Kansas City 12, Mo.

American Medical Association, Annual Meeting, June 16-20, 1963, Atlantic City, N. J. F. J. L. Blasingame, executive vice president, 535 N. Dearborn, Chicago 10, Ill.

Mid-South Postgraduate Medical Assembly, Feb. 12-15, 1963, Memphis, Tenn. Mr. Leslie Adams, Executive Secretary, 774 Adams St., Memphis 5, Tenn.

Southern Medical Association, Nov. 18-21, 1963, New Orleans, La. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham 5, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 13-16, 1963, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Amite-Wilkinson Counties Medical Society, First Tuesday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday Monthly, 6:30 p.m., Robert E. Lee Hotel, Jackson. George E. Gillespie. 514-A East Woodrow Wilson Drive, Jackson, Secretary.

Claiborne County Medical Society. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Second Wednesday March and November, 2:00 p.m., Clarksdale. Whitman B. Johnson, Jr., 645 Evelyn Ave., Clarksdale, Secretary.

Coast Counties Medical Society, First Wednesday March. June. September, and November. Charles N. Floyd, 1412-23rd Ave., Gulfport, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. Hugh S. Rayner, Jr., 1216-21st Ave., Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March and September. Robert B. Townes, Jr., 1196 Mound St., Grenada, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. Thomas W. Wesson, 421 Main St., Tupelo, Secretary.

North Mississippi Medical Society, First Thursday January, April, and October, Oxford. Marcus E. Morrison, 512 Van Buren Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Samuel O. Massey, Jr., 220 E. Canal St., Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. Thomas F. Puckett, 715 Arledge St., Hattiesburg, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Tom H. Mitchell, The Street Clinic, Vicksburg, Secretary.



The President Speaking

'Worthy Means, Meritorious End'

C. P. CRENSHAW, M.D.
Collins, Mississippi

PRIVATE ENTERPRISE HAS SCORED another breakthrough in the labor relations field which might someday put the federal government out of the unemployment compensation business. It's a new form of health insurance providing high levels of income protection for disabled employees whose illness or injury is not job-connected. The Health Insurance Institute says that not since the introduction of major medical expense coverage 12 years ago have insurance executives been so enthused about a new type of health contract.

Called group long-term disability insurance, it is a program of guaranteed salary continuance. And as with major medical at its inception, LTDI was initially available to management personnel only. Now, everybody from the chairman of the board to the office boy is eligible for coverage. Premiums paid for the contracts are fully tax deductible by the employer and are not considered additional income to the employee. Existing tax laws permit $100 per week in tax-free disability income during disability.

Long-term disability insurance can and will exert a beneficial impact on private health services. Employees, guaranteed up to 75 per cent of salary during disability, can maintain their respective family households without income interruption during long periods of illness. They can purchase medical care beyond the benefit range of ordinary health insurance and prepayment coverage. Moreover, the options accrue to the ill employee, the individual who must have the right of full free choice during disability which is non-compensable under workmen's compensation.

And LTDI demonstrates clearly that the federal government will someday have little justification for arguing the necessity of more and bigger tax-supported compensation programs where a worker, because of life-long illness, can't hold his job. Such is the ingenuity of private enterprise in action and such is a worthy means to a meritorious end. ★★★

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EDITORIALS

Ulcerogenic Tumors of the Pancreas: Zollinger-Ellison Syndrome

In 1955 Zollinger and Ellison[1] reported two well-documented cases of primary benign jejunal ulceration associated with non-beta islet cell tumors of the pancreas. Eighty such cases had been reported by 1960, establishing the Zollinger-Ellison syndrome as a definite surgical entity.

The syndrome is characterized by a diagnostic triad: (1) A fulminating ulcer diathesis exists which often produces primary jejunal ulceration and persists as recurrent gastrojejunal ulceration even after adequate medical or radical surgical treatment. (2) There is marked gastric hypersecretion as determined by 12-hour nocturnal gastric aspiration. As much as 2 or 3 liters of gastric juice may be obtained in a one night aspiration in which the free hydrochloric acid may exceed 300 mEq. Normal 12-hour value is 18 mEq. (3) A non-beta islet cell tumor of the pancreas is present. These tumors may be single or multiple and occasionally can only be detected microscopically. Regardless of size, two-thirds of the tumors are malignant, and metastases are present in 40 per cent of cases.

Originally it was hoped that in the presence of a visible tumor of the pancreas, treatment could consist of resection of the tumor and conservative gastric resection. However, the tumors are frequently multiple or have metastasized so that ulcerogenic properties persist. Recurrent ulceration cannot be controlled by vagotomy and antrectomy. As long as any gastric mucosa remains in the presence of the ulcerogenic tumor, large volumes of gastric juice of high acid value will be produced. Thus, the verification of an ulcerogenic tumor of the pancreas should be accompanied by total gastrectomy. In the absence of obvious regional or distant metastasis, resection of the body and tail of the pancreas together with total gastrectomy is the only effective treatment.

In their original report Zollinger and Ellison postulated that the pancreatic tumor produced a hormonal factor which caused the hypersecretion of gastric juice. Recently Freisen, et al.,[2] have successfully extracted a gastrin-like substance from a metastatic pancreatic tumor of a patient with Zollinger-Ellison syndrome. Injection of this extract into dogs with a denervated-fundic pouch produced marked secretion of gastric juice with high acid content. This lends strong support to the humoral theory as the cause of gastric hypersecretion.

Although ulcerogenic tumor of the pancreas is rare, a careful search for adenomas of the pancreas should be made in all persons operated upon for peptic ulcer, especially if a primary jejunal ulcer is present.—G.H.M.

REFERENCES

1. Zollinger, R. M., and Ellison, E. H.: Primary Peptic Ulcerations of Jejunum Associated with Islet Cell Tumors of Pancreas, Ann. Surg. 142:709-728 (Oct.) 1955.
2. Freisen, S. R.; Tracy, H. J.; and Gregory, R. A.: Mechanism of the Gastric Hypersecretion in the Zollinger-Ellison Syndrome; Successful Extraction of Gastrin-like Activity from the Metastases and Primary Pancreatico-Duodenal Islet Cell Carcinoma, Ann. Surg. 155:167-174 (Feb.) 1962.

Don't Be Caught Dead!

Nearly everybody agrees that seat belts in automobiles make good safety sense. In this context, everybody includes the American Medical Association, the National Safety Council, many state governments, and a plethora of engineering, automotive manufacturing, research, and medical organizations. By law, all 1963 model cars sold in Mississippi are equipped with belts in the front seat. Other states have similar legislation and many are considering such enactments.

During its milestone studies of automotive crash injuries, Cornell University has discovered and published impressive evidence that seat belts save lives. Among the most convincing such data is a recently released study of rollover accidents in convertible model cars. A comparison was made with injuries sustained by occupants of other body styles where the latter were involved in identical rollover accidents. Astonishingly, the injury rate between the soft and hard top cars *varied not more than 0.01 per cent* when seat belts were worn by the occupants. Thus, it was logically concluded that injury to non-ejectees in rollover mishaps seems no worse in convertibles than in cars of other body styles.

So put the top down, drive carefully, and have a good time in the sun. But don't be caught dead sitting on your seat belt.—W.M.D.

That More May Live Longer

Death and taxes are certain and the poor we always have with us. To the latter might also be added the antivivisectionists. When they espouse their peculiar philosophy, they deliver a rebuttal against themselves. When they make a scathing attack on man's inhumanity to animal, they are generally *not* talking about those whose lives and talents are dedicated to the eradication of disease through medical research, although they think they are. It is unfortunate and regrettable that antivivisection arguments are emotional, but it is difficult to conceive them in any other light.

Maximum health safety and humane treatment of laboratory animals are not only measures of reasonable compassion, they are also good scientific methodology. It is paradoxical, indeed, that anyone can portray a medical research scientist as "inhumane" when his very purpose is elimination of human suffering. At the conclusion of the 87th Congress, there were pending two bills which, if enacted, would have seriously interfered with the humane use of animals in medical research. Reintroduction of the measures in the 88th Congress is virtually assured.

At its Los Angeles Clinical Session, the American Medical Association called attention to dangers inherent in this proposed legislation to medical research and authorized its representatives to perpare and present legislation designed to support research, training, and dissemination of information concerning humane use and care of laboratory animals. Surely, this vital issue concerns every American physician just as it concerns the health and well-being of every American.—D.H.

NEW MEMBERS

FRIDAY, HOWARD CARROLL, Jackson. Born Ancon, Canal Zone, May 14, 1930; M.D., Emory University School of Medicine, Ga., 1956; interned Piedmont Hospital, Atlanta, Ga., one year; residencies, Piedmont Hospital, Atlanta, Ga., one year, and University of Mississippi School of Medicine, Jackson, two years; captain, U. S. Army, two years; elected Oct. 2, 1962, by Central Medical Society.

GILLILAND, ROBERT NEAVES, Yazoo City. Born Kosciusko, Miss., Oct. 18, 1932; M.D., Tulane University School of Medicine, New Orleans, La., 1957; interned Charity Hospital of Louisiana, New Orleans, one year; captain, U. S. Air Force, two years; elected Oct. 2, 1962, by Central Medical Society.



"I just came in to talk over old times."

Book Reviews

Practical Anesthesiology. By Joseph F. Artusio, Jr., M.D., professor of anesthesiology in surgery and professor of anesthesiology in obstetrics and gynecology, Cornell University Medical College, New York, N. Y., and Valentino D. B. Mazzia, M.D., professor and chairman of the Department of Anesthesia, New York University School of Medicine and Postgraduate Medical School, New York, N. Y. 318 pages with illustrations. St. Louis: The C. V. Mosby Company, 1962. $7.75.

The authors state that they designed this book as a handbook for medical students, general practitioners, and nurse anesthetists.

It is divided into five parts and forty-three chapters. The binding, type, and paper are excellent. The author's style of writing is effective and very readable. However, since this was designed for the neophyte, it would have been greatly improved with more illustrations and graphic material.

There is a great deal of sound practical information presented, especially of the technical variety. However, this is presented without consideration or expanding on the developmental background, theory, or related basic science. There is no bibliography, but at the end of each chapter is a list of suggested readings which are excellent.

Part I is Basic Considerations which covers history and basic sciences. The history is comprised of a short but very interesting development of anesthesia in five stages. The anatomy section does not give anatomical descriptions of the discussed structures but presents the practical consideration from the anesthesiologist's standpoint. The section is quite short but should be extremely beneficial to the student since it is presented differently than the anatomy section in most other anesthesiology texts.

The physiology section has a wealth of pertinent material but could have been improved with illustrations. The pharmacology section is, in my opinion, incomplete.

Part II is Preanesthetic Considerations and here the wide experience of the authors results in a sound approach. The rest of the book is devoted mostly to the technical considerations, and again this covers a great deal of practical information.

This book would be of limited interest to the mature anesthesiologist but would be extremely valuable to the student.

ELIZABETH G. DOWDY, M.D.

Pediatric Diagnosis. By Morris Green, M.D., associate professor of pediatrics, Indiana University School of Medicine, and Julius B. Richmond, M.D., professor and chairman of the Department of Pediatrics, State University of New York College of Medicine at Syracuse. 541 pages. Philadelphia: W. B. Saunders Company, 1962. $13.00.

This is the second edition of a well-known tool for differential diagnosis in pediatrics. The essential ingredient in this work is the thorough coverage of a practical time-saving method of pediatric physical examination. This approach should be most useful to the neophyte in pediatric practice.

A change in format exists in the inclusion of references within the text. These are mainly periodicals and many of them 10-15 years old. This would be of aid for difficult diagnostic problems, but for the general pediatric practitioner the use of a complete standard text such as Nelson or Holt would furnish a ready reference companion. New chapters deal primarily with the differentiation of physical and psychosocial problems.

This book should be considered a must for the pediatric resident. The most useful portion for general practitioners is the identification of variations from normal which are thoroughly covered in the individual sections under physical diagnosis. An example is two formulas given for evaluation of head circumference measuring of the infant under the physical examination of the head.

In the section devoted to signs and symptoms the normal laboratory findings of substances rarely dealt with in practice, such as 17-keto-steroid excretion, is given.

The expenditure of $13.00 would be amply rewarding in that this book would not remain unused on the library shelf.

MARY J. WARD, M.D.

Clinical Pathology: Application and Interpretation. By Benjamin B. Wells, M.D., Ph.D., assistant chief medical director for research and education in medicine, Veterans Administration and former professor of medicine and chairman of the Department of Medicine, Creighton University School of Medicine, Omaha. 3rd Edition. 541 pages with illustrations. Philadelphia: W. B. Saunders Company, 1962. $9.00.

The author has done a remarkable job in rewriting this text and bringing it up to date with modern medicine. It is a very practical text and

should be on the desk of every general practitioner and specialist who depends on the laboratory for diagnostic aid.

It correlates clinical medicine and the laboratory by telling which tests are of value in a given disease, how to interpret the results, and how to recognize the limitations of such tests. It contains an accurate table of normal findings and common abnormal findings as they "creep" into laboratory reports. It stresses the differential diagnosis between diseases. It gives advice on the collection, preservation and handling of specimens in a given situation that assures the most accurate results. The section on laboratory methods describes many new procedures.

The text is easy to read and the index has been prepared in a most meticulous manner for easy reference.

R. M. MOORE, M.D.

DEATHS

ALSOBROOK, DANIEL CLEMENTS, Bolton. M.D., Atlanta College of Physicians and Surgeons, Ga., 1907; died Nov. 28, 1962, aged 80.

BROCK, WALTER GALLITON, West. M.D., Memphis Hospital Medical College, Tenn., 1902; emeritus member of MSMA; died Nov. 14, 1962, aged 84.

MCDEVITT, JOHN EDWARD, Vossburg. M.D., University of Tennessee College of Medicine, Memphis; emeritus member of MSMA; died Nov. 16, 1962, aged 75.

MULLEN, PARK CAREY, JR., Jackson. M.D., University of Tennessee College of Medicine, Memphis, 1943; interned Jackson Memorial Hospital, Miami, Fla., one year; died Nov. 7, 1962, aged 43.

NEWCOME, JAMES ARTHUR, Gulfport. M.D., Medical College of Virginia, Richmond, 1925; member of the American Psychiatric Association; died Oct. 16, 1962, aged 65.

WATSON, WILLIAM ARTHUR, Booneville. M.D., University of Tennessee College of Medicine, Memphis, 1911; member of the Fifty Year Club of MSMA; received Golden "T" Certificate from the University of Tennessee College of Medicine for 50 years of medical service; died Nov. 26, 1962, aged 82.

PERSONALS

JAMES M. BROCK of McComb was a guest lecturer during the December meeting of the Academy of Dermatology held in Chicago. Dr. Brock spoke on "Skin Cancer Surgery."

HERMAN E. KELLUM, JR., has been appointed head of the Department of General and Thoracic Surgery of the Vicksburg Hospital.

DONALD E. KILLELEA of Natchez has been certified as a diplomate by the American Board of Pediatrics.

JOHN R. KITTRELL of Laurel, an emeritus member of MSMA, was featured in the Nov. 16 issue of the Laurel *Leader Call*. The 96-year-old physician is a graduate of the University of Tennessee School of Medicine. He began his practice in 1896.

VAN C. TEMPLE of Hattiesburg has been named a member of the Board of Directors of the University of Southern Mississippi Foundation. Formerly known as the Mississippi Southern Foundation, the organization is the receptacle for all gifts to the institution. The name was changed to coincide with the new university status.

JAMES WAITES of Laurel has been named president-elect of the University of Southern Mississippi Alumni Association.

Physicians' Aid Asked In New IRS Program

Physicians' cooperation in submitting complete and accurate income tax returns was asked in a recent communication to MSMA from William J. Bookholt, regional commissioner for the Internal Revenue Service.

"Accuracy in filling out your Federal income tax return is more of a necessity this year than ever before because of the use of automatic data processing," wrote Mr. Bookholt.

Electronic computers will be used to process all claims filed in 1963. In the past, income tax returns were checked and processed by technicians skilled in correcting errors and making minor adjustments to tax reurns.

Mr. Bookholt urged taxpayers to cooperate in this program by filing early, being sure to enter social security numbers, writing or printing legibly, filling in the return completely, and above all, being accurate.

5,000 Hear 300 Presentations at AMA Meet; Dr. Culpepper Named to Board of Trustees

More than 5,000 physicians heard 300 presentations and saw as many exhibits as AMA convened its 16th Clinical Session at Los Angeles over the post-Thanksgiving weekend. Scientific topic highlights included air pollution, cancer, aerospace medicine, muscular dystrophy, hepatitis, viruses, problems in the aged, and suicide prevention.



Two medical leaders conduct a coffee break conference during busy Los Angeles sessions. Dr. C. P. Crenshaw, MSMA president, and Dr. Edward R. Annis, Miami, Fla., AMA president-elect, discuss a report before the meeting.

Dr. J. P. Culpepper, Jr., Hattiesburg, was named to the AMA Board of Trustees, succeeding Dr. Hugh H. Hussey of Washington, D. C. Dr. Culpepper, who is AMA vice president, will continue in the trustee capacity until the annual session at Atlantic City in June. He is also one of MSMA's two delegates at AMA.

Dr. C. P. Crenshaw, Collins, state association president, led the delegation of Mississippians, working in the House of Delegates with Dr. John F. Lucas, Greenwood, AMA delegate. Dr. Lucas was chairman of the Reference Committee on Rules and Order of Business.

Participating in the scientific assembly were Drs. Raymond F. Grenfell, Arthur H. Briggs, and William C. Holland, Jackson, representing the University of Mississippi School of Medicine. Dr. Grenfell presented a scientific exhibit on Double Blind Evaluation of Antihypertensive Therapy.

Delegates worked three days over annual reports and resolutions. Dr. George M. Fister, Ogden, Utah, AMA president, told the opening session of the House of Delegates that "we will not compromise on the fundamental principles in which we believe and for which we have fought in the past with courage and good judgment," making reference to the recent King-Anderson bill defeat in the administration's quest for compulsory federal medical care under Social Security.

Delegates called for revision by Congress of the Kerr-Mills law, asking removal of administrative restrictions at state level, more flexible income limits for those who may need help with medical bills, mandatory medical advisory committees, and unrestricted free choice of physician and hospital.

Four proposed amendments to the Internal Revenue Code of 1954 were endorsed. These would increase medical expense tax deductions for those over age 65, remove the 1 per cent drug limitation, include a carry-forward and carry-back tax credit system for medical expense deductions,



It's time out for a point of personal privilege as officers of the House and Mississippi delegates get together. From the left are Vice Speaker Milford O. Rouse, Dallas, Tex., Speaker Norman A. Welch, Boston, Mass., and MSMA delegates J. P. Culpepper, Jr., and John F. Lucas.

and a tax credit proportionate to income on medical care outlay for the aged.

A Judicial Council decision making dispensing of glasses by ophthalmologists and physician ownership of pharmacies or drug repackaging houses unethical was not acted upon and recommitted to the council for further study. Advertising practices by medical laboratories will henceforth, under the same series of actions, be judged as to propriety by local medical societies.

No action was taken on a controversial proposal to increase stipends to interns and residents by permitting them to associate in professional practice groups with hospital staffs so as to receive fee-for-service payment from insurance and voluntary prepayment plans. Elsewhere in the medical education field, delegates voted to change essentials for approved intern programs and ruled that at least 25 per cent of any teaching hospital's intern staff should be graduates of AMA-approved medical schools.

By a vote of 130 to 48 after spirited debate, the House enlarged the Board of Trustees from 11 to 15 members and reduced terms of office from five to three years. A technical defect in the balloting prevented amendment of the constitution but bylaws were held to have been legally changed. The faulty vote will be the first order of business at the June annual session.

In miscellaneous actions, the House urged amendment of the Hill-Burton law to eliminate the term "diagnostic and treatment centers" to prevent federal funds being awarded to closed panel groups and medical corporations. New educational curricula for inhalation therapy technicians and cytotechnologists were approved as were revisions for residencies in pediatric cardiology.

Delegates warned that immunization against smallpox was at a dangerously low level in the United States and in another action, urged closer liaison between medical societies and public health departments, keeping in mind the need for a proper balance between public health programs and the private practice of medicine.

The American Medical Association Education and Research Foundation received gifts during the meeting of $540,500 from five state medical associations and a pharmaceutical manufacturer. The money will bolster the highly successful student-intern-resident loan program which has loaned $9 million this year. Every $100 received by AMA-ERF, it was explained, releases $1,250 in loans through banks at low interest. The program is voluntarily supported through gifts.

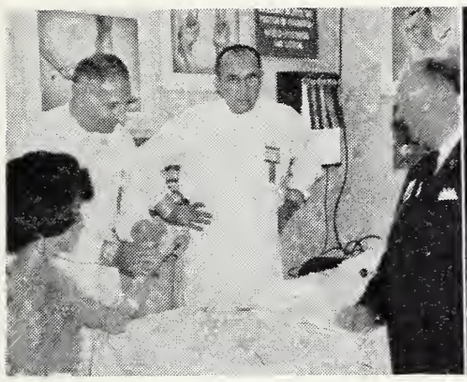
Mrs. William G. Thuss, Birmingham, AMA Auxiliary president, urged that medical associations make full use of the group's "woman-power potential" in carrying out medicine's programs. Two Baltimore physicians, Drs. Vernon M. Smith and Ruben P. Mallari, won the Hull award given each year at the clinical session for their exhibit on gastrointestinal endoscopy. The American Medical Political Action Committee conducted two meetings before which Reps. Robert Wilson (R., Calif.) and Walter Baring (D., Nev.) appeared as speakers.

A pre-session medical service conference devoted to implementation of the Kerr-Mills program throughout the nation was keynoted by the conservative senator, Carl Curtis (R., Neb.) who hit federal medicine with both barrels.

Sen. Curtis said, "Americans will never deliberately choose socialism, but the danger is that little by little we are tempted with programs that must, and will ultimately, lead to socialism."



Left, four AMA leaders are, from the left, Drs. Percy E. Hopkins, Chicago, chairman of the Board of Trustees; J. P. Culpepper, Jr., Hattiesburg, vice president and board member; F. J. L. Blasingame, Chicago, executive vice president; and E. B. Howard, Chicago, assistant executive vice president. Middle photo catches Dr. Raymond F. Grenfell, Jackson, at his scientific exhibit in the Los Angeles Shrine Auditorium. Right, Drs. C. P. Crenshaw and John F. Lucas visit the Mississippi flag during an early morning stroll to the Court of the States.







Left, President Crenshaw said it was a lovely reduction as he visited a scientific exhibit on fractures of the radius. In the center photo, reference committee chairman, Dr. John F. Lucas, reports to the House of Delegates. Right, it looks political as Dr. Crenshaw, Rep. Walter S. Baring (D., Nev.), and Dr. Bradford Murphey, Denver, president of the Colorado Medical Society huddle before Mississippi-grown magnolias.

Curtis said that every European country has some form of socialized medicine and that Europe no longer leads the world in medical science. Instead, he asserted, the U. S., with its private care system, has replaced Europe.

Most talked-about scientific session was the suicide prevention symposium, formally titled "New Approaches to Depression and Suicide." Six essayists, including the Los Angeles psychiatrist who was called to investigate the death of actress Marilyn Monroe, spoke to a standing-room-only house. Dr. Louis I. Dublin, Florida biostatistician, said that 30 years ago suicide was more prevalent in low income groups. Today, he continued, it is more prevalent among top income earners.

Other speakers said that New Orleans, Elizabeth, N. J., Yonkers, N. Y., and Madison, Wis., had the lowest suicide rates in the nation. Where self-inflicted death was once rare in rural areas, the urban-rural gap has narrowed in recent years.

Dr. Norman I. Farberow, director of the Los Angeles Suicide Prevention Center, reported studies of male Caucasian cancer patients in VA hospitals, stating that half had committed suicide. Dr. Sherman Little, Los Angeles Children's Hospital psychiatrist, said suicide in children showed up more often when diabetes and congenital heart defects were present or when various forms of depression occurred.

Color television dealt with colitis and cancer while film showings ran the gamut of clinical subjects. The 4th National Conference of Medical Aspects of Sports considered track, field, and water sports injuries. Registrants at a muscular dystrophy seminar heard Dr. Robert M. Dowden, Chicago, suggest that MD may be a metabolic disorder. He said that 200,000 Americans have the disease.

Despite the special session on air pollution and its relationship to sickness and health, the famed Los Angeles smog made no major appearances during the five day meet.

Saunders Invites Applications For Medical Writing Awards

The W. B. Saunders Company, medical and scientific publishers, has established a $15,000 medical writing award in celebration of its 75th anniversary.

To be presented in October 1963, the grant will provide financial support for a year's leave of absence for an investigator who (1) has been doing fruitful and significant biomedical laboratory research over the past several years, and (2) would like to have time for thought and for preparation of his work in monographic form.

The award recipient will not have to agree to publish his monograph with the Saunders Company. He will be free to write, instead of a book, a series of journal articles reviewing his research.

Areas of research in the medical sciences and clinical medicine which are acceptable for award consideration are extremely broad with a preference for those which could be translated into clinical usefulness within the foreseeable future. The investigator should be a resident of the Americas, but he may be doing his laboratory work outside the Western Hemisphere.

The reviewing committee is made of up 20 men who are well versed and well recognized in the fields of medical science and clinical medicine.

Applications should be submitted between Jan. 1, 1963, and May 1, 1963, to Dr. Robert F. Loeb, W. B. Saunders Company, West Washington Square, Philadelphia 6, Pa.

34 State Areas Have Optimum Fluoride Content

Mississippi has 34 communities in which the fluoride content of the drinking water supply is 0.7 part per million or more. These communities and others like them throughout the United States are shown on the map below.

Water containing 0.7 ppm or more of fluoride approaches the optimum concentration in as far as reducing dental caries is concerned. Four of the Mississippi communities, Brooksville, Drew, Mound Bayou, and Sturgis have exactly 0.7 ppm concentration of fluoride in their water supply. The rest have more than this amount.

Eleven of the Mississippi areas have controlled fluoridation. They are: Calhoun City, Columbia, Columbus, Como, Forest, Kosciusko, Louisville, Marks, Meridian, New Albany, and Newton.

The other 23 have natural fluoridation. They are Biloxi, Brooksville, Crosby, Doddsville, Drew, Duncan, Electric Mills, Glen Allen, Gunnison, Lauderdale, Moss Point, Mound Bayou, Pascagoula, Raymond, Scooba, Sherard, Shubuta, Shuqualak, Sturgis, Sumner, Sunflower, Utica, Valley Park.

The map and listings were prepared by Mead Johnson Laboratories. Individual copies of the material may be secured from Joseph M. McCarthy, Public Relations Associate, Mead Johnson and Company, Evansville 21, Indiana.

UMC Sets Final Lecture In Social Science Series

The University of Mississippi School of Medicine has slated Jan. 25 for the final lecture in its Social Science in Medicine Series. Guest lecturer will be Gregory Bateson, anthropologist, who will talk on "Communicational Factors in Mental Illness."

Mr. Bateson's current teaching assignments are in the Ethnology Section of the VA Hospital in Palo Alto, Calif., and as a part-time professor at both Stanford University and the California School of Fine Arts, San Francisco.

A native of England, Bateson got his B.A. in natural science and M.A. in anthropology at Cam-



The dots on the map above show areas in the United States where fluoride content of the drinking water supply is 0.7 ppm or greater. Mississippi has 34 such areas.

bridge University where he was awarded numerous scholastic honors, studentships and fellowships. He did his early anthropological field work in New Guinea, New Britain and Bali, later traveled in Ceylon, India, Burma and China with the U. S. Office of Strategic Services. His scientific investigations are reported in more than 50 published articles, several books and monographs and range from his early studies with primitive cultures through his current investigation of schizophrenia and family structure.

Bateson has been living in the United States since 1940 and became a naturalized citizen in 1956. He has been a visiting professor at Harvard, the New School of Social Research in New York and did research at the University of California.

Since 1952 Bateson has been conducting investigations which relate directly to the topic of his talk here. He was director of a project on the role of the paradoxes of abstractions in communication, under a grant from the Rockefeller Foundation, and another 5-year study on schizophrenic communication, financed by the Josiah Macy Jr. Foundation. His current research concerns family psychotherapy, under grants from the National Institutes of Mental Health and the Foundation's Fund for Research in Psychiatry.

The Social Science in Medicine series was begun in January 1962 as a pilot program. It was designed to show the relationship between medicine and the behavorial sciences. Physicians, social workers, mental health workers, and others in allied professions were invited to attend the series.

Mr. Bateson will address University staff members on Thursday at 4 p.m. in Room 7-A. The general professional public is invited to his Friday lecture which is set for 1 p.m. in Room 5-A.

Scientific Exhibits Invited For MSMA's 95th Session

A last call has been issued for scientific exhibits to be on display at MSMA's 95th Annual Session, according to Dr. C. G. Sutherland, chairman of the Council on Scientific Assembly.

Dr. Sutherland urged prospective scientific exhibitors to send in their letters of applications to MSMA headquarters at 735 Riverside Drive, Jackson. He said letters should state the subject of the exhibit, physician or organizational sponsors, and minimum space requirement. Final decision on the exhibits will be reached during January, he said.

MSMA members presenting scientific exhibits are eligible for the scientific achievement award. Beginning with the 1963 meet, the award will be a mounted medallion designed especially for MSMA by L. G. Balfour Company of Attleboro, Mass. The winner's name and the year will be engraved on the medallion which supercedes the gold medal award of previous years. Nonmember exhibitors will compete for citations of honorable mention.

Set for May 13-16, the 95th Annual Session will have its headquarters in the Buena Vista Hotel in Biloxi. The scientific exhibit will be located in the new Hurricane Room E and will be open only to registered members and guests.

Circuit Courses Slated For Southern Mississippi

Gulfport, Laurel, and Hattiesburg will be included in the southern swing of the Circuit Courses sponsored by the University of Mississippi School of Medicine.

The courses will be held at Memorial Hospital in Gulfport at 6:30 p.m. on Jan. 16, 23, and 30; at Jones County Community Hospital in Laurel at 2:00 p.m. on Jan. 17, 24, and 31, and at Methodist Hospital in Hattiesburg at 6:30 p.m. on Jan. 17, 24, and 31.

At the first session of each tour, Dr. Cyrus Johnson, clinical instructor in surgery, will talk about prostatism; Dr. Julian Youmans, associate professor of neurosurgery, will discuss management of low back pain, and Dr. Curtis Artz, professor of surgery, will review treatment of peptic ulcers.

At the second session, asthma in childhood and renal diseases in children will be discussed by Dr. Wilfred Q. Cole, clinical assistant professor, and Dr. Jose M. Montalvo, instructor in pediatrics. From the Department of Obstetrics and Gynecology, Dr. Lois M. Mosey, assistant professor, and Dr. Blanche Lockhard, clinical instructor, will talk about amenorrhea and methods of controlling conception.

Speakers at the last session will be Dr. Richard H. Levin, assistant professor of psychiatry; Dr. Robert Currier, assistant professor of medicine, and Dr. Fred Allison, associate professor of medicine. Their topics are psychiatric units in general hospitals, management of strokes, and rational antibiotic selection.

Physicians in southern Mississippi may select the sessions most convenient, and may attend a missed lecture in another city if they wish. Eleven hours of category 1 postgraduate credit will be granted for full attendance. MSMA and MAGP cooperate in this series.

Mid-South Assembly Scheduled for Feb. 12-15

The Mid-South Postgraduate Medical Assembly will meet for its 74th Annual Meeting Feb. 12-15 at the Hotel Peabody in Memphis.

A Mississippi physician, Dr. Stanley A. Hill of Corinth, will be inaugurated as president at the close of the session. Dr. Gilbert J. Levy of Memphis is currently serving as president of the assembly.

Speaker for the Thursday annual banquet will be Dr. Edward R. Annis of Miami, president-elect of the American Medical Association. Other speakers include Dr. Thomas T. Jones of Durham, N. C., associate in medicine, Duke University School of Medicine; Dr. I. Phillips Frohman of Washington, D. C., general practitioner; Dr. Claude E. Welch of Boston, Mass., associate clinical professor of surgery, Harvard Medical School; Dr. Robert Turell of New York, associate professor of clinical surgery at the Albert Einstein College of Medicine; Dr. Frederick Stohlman, Jr., of Boston, Mass., associate professor of medicine, Tufts University and Georgetown University School of Medicine.

Also Dr. Edward Massie of St. Louis, Mo., associate professor of clinical medicine at Washington University School of Medicine; Dr. Thomas B. Connor of Baltimore, Md., professor and director, Division of Endocrinology and Metabolism, University of Maryland School of Medicine; Dr. David H. Law of Nashville, Tenn., assistant professor of medicine, chief of the Division of Gastroenterology, Vanderbilt University; Dr. H. J. Svien of Rochester, Minn., associate professor of neurologic surgery, Mayo Foundation Graduate School, University of Minnesota.

Also Dr. Edward C. Hughes of Syracuse, N. Y., professor of obstetrics and gynecology at the State University of New York, Upstate Medical Center; Dr. Jacoba C. de Neef of Columbus, Ohio, associate professor in obstetrics and gynecology, Ohio State University; Dr. Fred C. Reynolds of St. Louis, Mo., professor of orthopaedic surgery, Washington University School of Medicine; Dr. Sheldon C. Sommers of La Jolla, Calif., professor of clinical pathology at the University of Southern California.

Also Dr. F. H. Wright of Chicago, Ill., professor of pediatrics, University of Chicago Hospitals and Clinics; Dr. Henry G. Cramblett of Winston-Salem, N. C., associate professor of pediatrics, Bowman Gray School of Medicine; Dr. Samuel H. Kraines of Chicago, Ill., psychiatrist; Dr. Edward B. Singleton of Houston, Texas, associate professor of radiology, Baylor University College of Medicine; Dr. Herbert D. Adams of Boston, Mass., Department of Thoracic Surgery, Lahey Clinic, and Dr. Victor F. Marshall of New York, professor of urological surgery, Cornell University Medical Center.

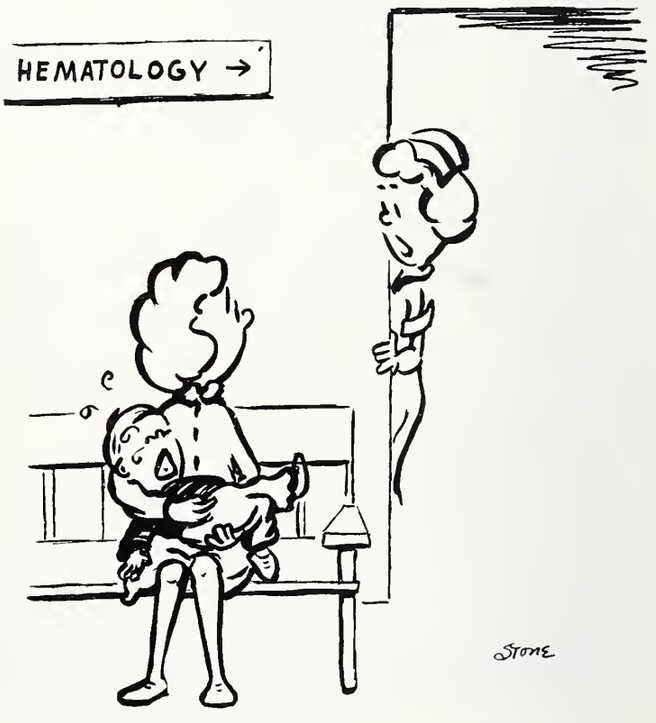
Further information and registrations forms may be secured from Mid-South Postgraduate Medical Assembly, 774 Adams Avenue, Memphis 5, Tenn.

Dr. Vise Named Chairman Of SMA Council

Dr. Guy T. Vise of Meridian was named chairman of the 17-member governing Council of the Southern Medical Association during SMA's Nov. 12-15 meeting.

Now serving as chairman of MSMA's Council on Medical Service, Dr. Vise is a past president of MSMA and immediate past president of the Mississippi Academy of General Practice. Dr. Oscar Benwood Hunter, Jr., of Washington, D. C., will serve with Dr. Vise as vice chairman of the Council.

New president of SMA, elected at the Miami Beach meeting, is Dr. Daniel L. Sexton, St. Louis, Mo. Other officers chosen are Drs. Robert D. Moreton, Fort Worth, Tex., president-elect; R. H. Kampmeier, Nashville, Tenn., first vice president,



Copyright 1962, Mississippi State Medical Association

"Could you please stop those blood-curdling screams?"

and Leonidas W. Dowlen, Miami, Fla., second vice president.

Re-elected were executive director, Robert F. Butts, and advisor and special consultant, C. P. Loranz, both of Birmingham, Ala.

The 57th Annual Meeting of the 15,000-member Southern Medical Association, the nation's second largest general medical group, will be held in New Orleans, La., Nov. 18-21, 1963.

Dr. H. C. Ricks Retires From State Board of Health

Dr. H. C. Ricks officially ended 34 years of service with the State Board of Health on Dec. 6. Retirement ceremonies in his honor were conducted at the Board of Health before an audience of 400 friends and co-workers.

Represented by Nat S. Rogers, Dr. Ricks's son-in-law, the Ricks family presented a portrait of the retiring official to the State Board of Health. Dr. A. L. Gray, state health officer, accepted the portrait and presented a certificate of merit to Dr. Ricks.

Other principals in the presentation ceremonies were Dr. M. K. Brooke of the Communicable Disease Center, Public Health Service, Atlanta, who spoke on Dr. Ricks's leadership in the public health field, and Richard Andrews, assistant director of the state public health laboratories, who presided at the ceremonies. Mr. Andrews is Dr. Ricks's successor as laboratory director.

The Division of Public Health Laboratories, which Dr. Ricks directed for 24 years, honored him with a reception following the ceremonies.

On Friday night, Dec. 7, professional and personal friends of Dr. Ricks honored him with a testimonial dinner. He was presented a gift in silver in commemoration of the event.

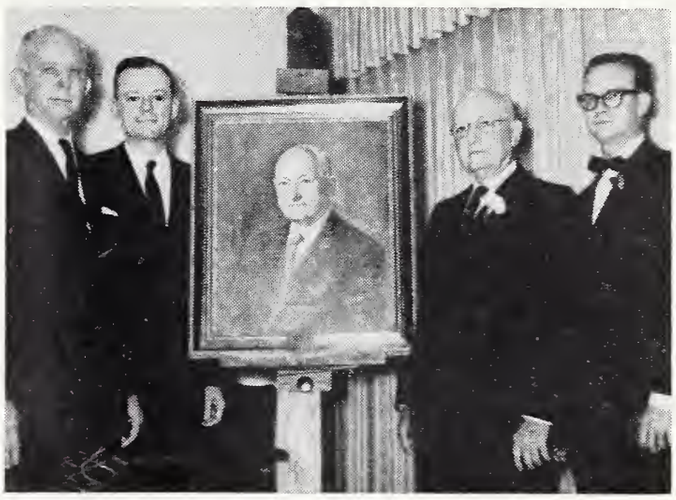
A native of Georgia, Dr. Ricks received his medical degree from Emory University Medical School in 1916. He interned at the St. Louis Southwestern Railway Hospital at Texarkana, Texas, during 1916 and 1917. Following his internship, he was house physician at the Sherman Hospital, Sherman, Texas.

During World War I, Dr. Ricks served with the Third Division of the regular Army holding the final rank of Captain. He was cited by the commanding general of the Third Division for gallantry in action, entitling him to the Silver Star decoration on two occasions.

Returning to civilian life, Dr. Ricks entered the practice of medicine at Caddo, Okla., leaving there in 1922 to open practice in Durant, Okla. In 1924 he was appointed director of laboratories for the Oklahoma State Board of Health.

He attended the Johns Hopkins University School of Hygiene and Public Health during 1926-27, receiving the master of public health degree. He first became associated with the Mississippi State Board of Health as director of the Division of Epidemiology and Communicable Disease Control in October 1928. He assumed the directorship of laboratories in May 1938.

Dr. Ricks served as president of MSMA in 1956-57 and has served as member and secretary of the Board of Trustees. He is a member and past president and past secretary of the Central Medical Society and a member of the American Medical Association.



The family of Dr. H. C. Ricks, Sr., presented his portrait to the State Board of Health at Dec. 6 retirement services. From the left are Dr. A. L. Gray, who accepted the portrait for the board, Nat S. Rogers, who represented the family, Dr. H. C. Ricks, Sr., and Dr. H. C. Ricks, Jr.

He is a member and has served as chairman of the Public Health Section of the Southern Medical Association. Dr. Ricks holds membership in the Mississippi Association of Pathologists and the American Society of Tropical Medicine and Hygiene and is a fellow of the American Society of Clinical Pathologists.

During World War II, Dr. Ricks served as examining physician for Local Board No. 2, Selective Service System, and has served continuously since then as a member of the Appeals Review Board of the Selective Service System.

Dr. Ricks is married to the former Miss Myrtle Evelyn Hilger of Sherman, Texas. The Ricks have two children—Dr. Henry Crozier Ricks, Jr., who has recently completed two years of special training in pediatric psychiatry at the Central Clinic, Cincinnati General Hospital, Cincinnati, Ohio, and Mrs. Nat S. Rogers, née Helen Elizabeth Ricks, of Jackson. Dr. and Mrs. Ricks have four grandchildren.

Dr. Moore Receives Fifty Year Club Insignia

Dr. Dudley R. Moore of Byhalia received the Fifty Year Club pin and insignia at a Nov. 29 celebration commemorating his 50 years of medical practice and his 75th birthday.

The ceremonies were held at the Byhalia Methodist church which Dr. Moore has served in numerous capacities including a 32-year term as church school superintendent. Dr. LeRoy Wilkins of Clarksdale made the presentation and Dr. Rhea L. Wyatt of Oxford, president of the North Mississippi Medical Society, made the introduction.



Dr. Dudley R. Moore, Sr., of Byhalia was awarded a Fifty Year Club pin and insignia in Nov. 29 ceremonies. From the left are Dr. R. L. Wyatt, president of the North Mississippi Medical Society; Dr. Moore, Mrs. Moore, and Dr. Leroy Wilkins, who made the presentation.

Dr. Moore has served as president of the DeSoto County Medical Society and the North Mississippi Medical Society. He has been president of the Citizens Bank of Byhalia for 20 years.

A native of Holly Springs, Dr. Moore is a graduate of Meridian Junior College and Vanderbilt University School of Medicine. He began his practice in Cockrum. Dr. Moore served in World War I from 1917 to 1919 and was a surgeon with the 42nd Engineer Corps in France for a year.

Jones County Society Names Dr. Bouchillon President

Dr. C. D. Bouchillon of Laurel has been named to succeed Dr. F. M. Shell, also of Laurel, as president of the Jones County Medical Society.

Other officers elected by the society are Dr. Maura Mitchell of Ellisville, vice president, and Dr. Robert W. Taylor, secretary-treasurer.

UMC Announces Seminar On Gynecologic Endocrinology

A Gynecologic Endocrinology Seminar is scheduled for Jan. 17, 1963, at the University of Mississippi School of Medicine.

Two guest authorities who will head the faculty for this latest in the continuing education series are Dr. Robert B. Greenblatt, professor of endocrinology at the Medical College of Georgia and Dr. Robert W. Kistner, assistant professor of obstetrics and gynecology at Harvard Medical School. Their topics are family planning and endometriosis.

UMC faculty members also will emphasize the practical aspects of endocrinology in various gynecologic problems encountered in practice.

A simplified scheme for recording vaginal bleeding will be discussed by Dr. Karl A. Bolten, assistant professor of obstetrics-gynecology, who is also program coordinator. The department chairman, Dr. Michael Newton, will talk about some endocrinologic aspects of galactorrhea, and Dr. Lois Mosey, assistant professor, will review diabetes and pregnancy.

From the department of pediatrics, Dr. Jose M. Montalvo, instructor, will describe abnormalities and variation of sexual development during childhood and adolescence. Diagnosis and management of infants with ambiguous genitalia is the subject of Dr. J. Darrel Smith, associate professor. The role of endocrine laboratory tests will be reviewed by Dr. Herbert Langford, associate professor of medicine.

Registration will begin at 8:30 p.m., and time



"When did you first notice that you were afraid to do any more skin diving?"

is allowed for group discussion at 4:55 p.m., following the lectures.

Arrangements for the guest lecturers have been made with the cooperation of G. D. Searle and Company. Application has been made to the Mississippi Academy of General Practice for six hours of category 1 postgraduate credit.

Advance registration is invited but not required. A tuition fee of $10 will be charged.

Tri-State Thoracic Meet Set for Jan. 11-12

The Seventh Annual Tri-State Consecutive Case Conference will be held Jan. 11 and 12, 1963, at the Buena Vista Hotel in Biloxi.

The meeting is sponsored jointly by the tuberculosis associations and thoracic societies of Mississippi, Louisiana, and Alabama as a part of their respective programs of medical education. Attendance is estimated between 80 to 100 physicians.

Out of state discussants will include Dr. Benjamin Felson, professor of radiology, University of Cincinnati School of Medicine, Cincinnati, Ohio; Dr. Sol Katz, chief of medicine, Mt. Alto VA Hospital, associate professor of medicine, Georgetown University School of Medicine, Washington, D. C.; and Dr. Neil C. Andrews, associate professor of surgery, Ohio State University School of Medicine, Columbus, Ohio.

In addition to the guest discussants each session will be moderated by one physician from each of the three states. These include Dr. Guy D. Campbell from Jackson, Miss.; Dr. Morton M. Ziskind from New Orleans, La., and Dr. Ben Branscomb of Birmingham, Ala.

Program participants will include Dr. Rush Netterville of Jackson, Miss., who will present ten consecutive cases of bronchiectasis, and Dr. Myra D. Tyler of Jackson and Dr. Campbell who will present ten cases for pulmonary cyst-bullae. Louisiana's program participants will include Dr. Charles P. Oderr who will present ten cases for diagnosis with important radiological features and Dr. Seymour F. Ochsner who will present ten cases for diagnosis with important radiological features.

This unusual and interesting form of scientific assembly for physicians has proven most popular in the field of respiratory diseases. Similar consecutive case conference type meetings are conducted as a part of the medical education program of tuberculosis associations in other parts of the United States.

For further information regarding this meeting, please contact any officer of the Mississippi Thoracic Society or address your inquiry to Post Office Box 9865, Northside Station, Jackson, Miss.

MSMA Honors Squadron Commander



Dr. C. P. Crenshaw of Collins, MSMA president, presents a watch to Lt. Col. George M. McWilliams, commander of the 183rd Aeromedical Transport Squadron, Jackson. The gift was an expression of the association's appreciation for support and assistance in conducting the Symposium on Space Medicine during the 94th Annual Session last May.

History of Medicine Society Founded at UMC

Initiated by students at the University of Mississippi School of Medicine, meetings of the new History of Medicine Society have been attracting faculty members and practicing physicians.

"The sole criterion for membership," says Chairman J. Clinton Smith, sophomore from Jackson, "is the desire to deepen knowledge of medicine through learning its historical implications, as well as studying the aspects covered in formal courses."

After the organizational meeting in October, the society's November meeting featured a talk on resurrectionism of the middle 19th century in Great Britain by Carroll Ball, anatomy instructor. At the December meeting, a panel discussed the history of men and disease.

Dr. Curtis P. Artz, professor of surgery, is faculty advisor. Interested physicians are welcome to attend any and all meetings and are eligible for membership.

Alcorn County Society Hears Memphis Urologist

Dr. William Morse, a Memphis urologist, was guest speaker for the November meeting of the Alcorn County Medical Society. Dr. Morse spoke on "Urological Problems in Children."

During the business meeting, society members elected Dr. T. L. Sweat president for 1963. Other officers are Dr. Frank Davis, vice president and Dr. Mary Ward, secretary-treasurer. Dr. Dennis Ward was elected delegate to the Mississippi State Medical Association. All are from Corinth.

Ob-Gyn Board Sets Part II Exams

The American Board of Obstetrics and Gynecology has announced Part II examinations, oral and clinical, for April 29-May 4, 1963.

Examinations will be conducted by the entire board at the Edgewater Beach Hotel in Chicago, Ill. Formal notice of each candidate's examination will be sent him in advance of the examination dates.

Candidates who have participated in the Part I examination will be notified of their eligibility for the Part II examination as soon as possible.

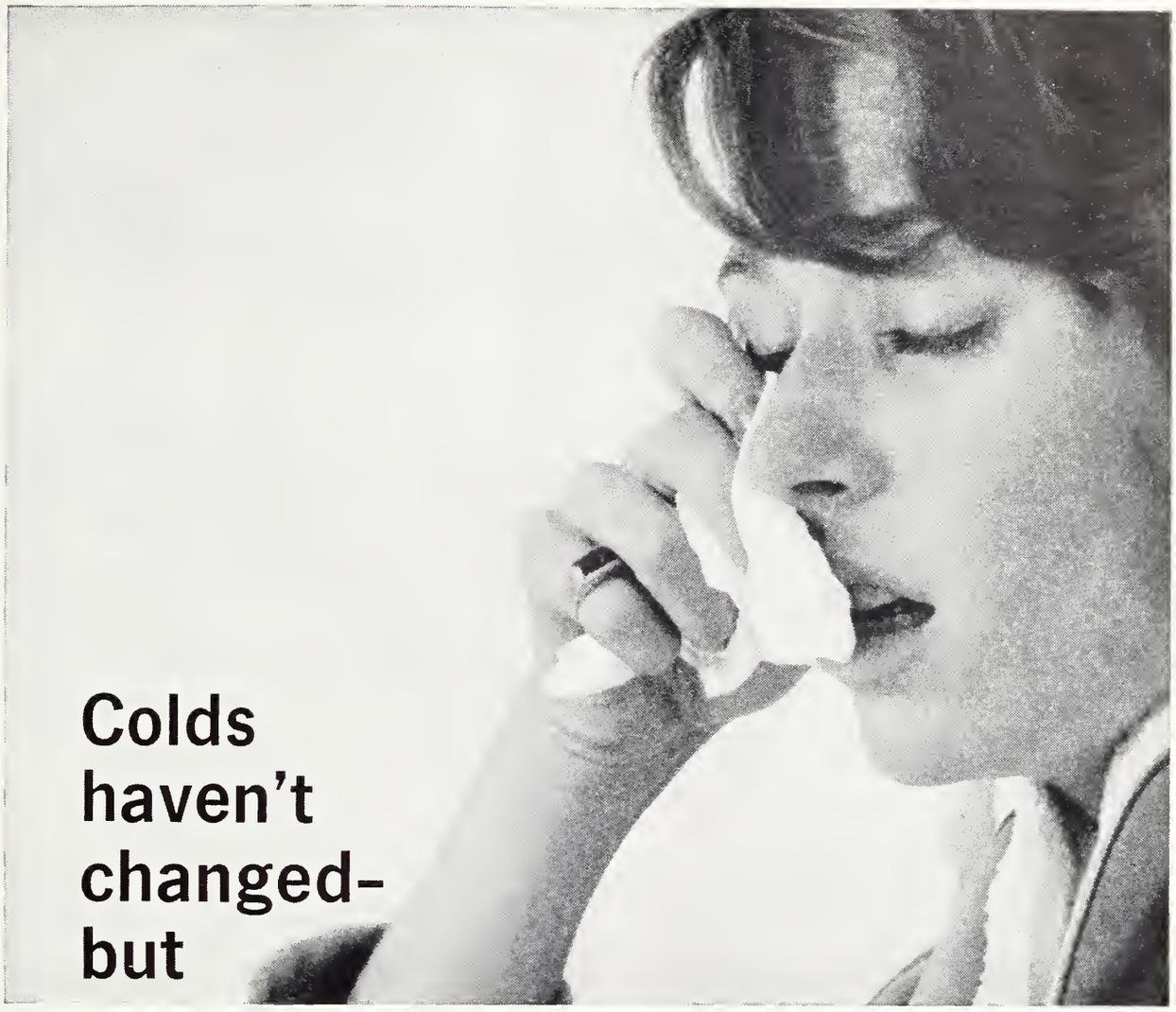
Current Bulletins of the American Board of Obstetrics and Gynecology outlining the requirements for application, may be obtained by writing to Robert L. Faulkner, M.D., 2105 Adelbert Road, Cleveland 6, Ohio. All prospective candidates are urged to review the current requirements before applying for board examination.

Diplomates are requested to keep the board office informed of any changes in address.

State Morbidity Reported Through Nov. 30

The Mississippi State Board of Health reports the following occurrence of morbidity for 1962 through the 48th week of the year, ending Nov. 30, 1962. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	652
Tuberculosis, O.F.	43
Anthrax	1
Typhoid fever	6
Salmonella infections	25
Salmonella food poisoning	4
Brucellosis	2
Dysentery	
Amebic	43
Bacillary	56
Dysentery, NOS	2
Food poisoning, NOS	4
Septicemia, Strep.	4
Septicemia, Staph.	89
Leptospirosis	3
Toxoplasmosis	1
Staphylococcus infection	7
Poliomyelitis	14
Diphtheria	8
Meningococcus infection	
Meningitis	15
Meningococcemia	3
Meningitis, O.F.	81
Other complications of smallpox vaccination	3
Polyneuritis	2
Tularemia	2
Tetanus	12
Encephalitis, infectious	26
Encephalitis due to Herpes Virus	1
Adenovirus (ARD)	6
Mononucleosis, infectious	80
Trichinosis	1
Diarrhea of newborn	9
Hepatitis, infectious	791
Hepatitis, serum	1
Helminthic infections	
Hookworm	1,021
Ascariasis	364
Strongyloides	51
Cryptococcosis	2
Moniliasis	1
Actinomycosis	2
Other cestode infest. (HN)	2
Histoplasmosis	37
Other fungus infections	1
Streptococcus infections	
Scarlet fever	298
Strep throat	3,137
Malaria	1
Myelitis	3
Rheumatic heart	6
Rheumatic fever	3
Acute glomerulonephritis	11
Puerperal sepsis	2
Pertussis	135
Measles	2,751
Cowpox (vaccina sine vaccination)	2
Chickenpox	760
Mumps	435
Influenza	11,433
Gonorrhea	4,925
Syphilis	
Early	201
Late	315



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*Levin, S. J.: **Pediat. Clin. North America** 1:975, Nov., 1954.

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AMA Poll / Continued

Other developments included new type penicillins more efficient against drug-resistant bacteria and less likely to cause allergic reactions in patients.

There were also several pluses in the field of vaccines. The new measles vaccine was showing good results in field tests, although it is not yet on the market. Also, the way was possibly open for development of a German measles vaccine with isolation for the first time of the rubella virus. Also developed and being tested is a vaccine which promises success in malaria immunization.

The Sabin oral polio vaccine got its first wide-scale use and the incidence of polio appeared headed for an all-time low.

Public health in 1962 was less concerned with breakthroughs than with breakdowns. Smallpox created a scare and brought to light the fact that millions in America probably have no immunity to the disease. Taking note of the "dangerous low" in smallpox protection, the AMA urged physicians and their patients to help rebuild the nation's level of immunity to the disease. Venereal disease, supposed to be on the way out five years ago, was making a strong comeback, as was tetanus.

Stroke Conference Planned Early Next Year

More than 100 experts in the fields of stroke rehabilitation, management and prevention will attend a stroke conference, Feb. 14-16, 1963, in Chicago.

Purpose of the meeting is to develop source material and make policy recommendations for the First National Congress on Strokes, scheduled for either autumn, 1963, or spring, 1964.

The conference will be sponsored by the American Medical Association, American Heart Association, the heart disease control program of the U. S. Public Health Service, and the Office of Vocational Rehabilitation of the Department of Health, Education and Welfare.

Conference participants will represent more than 30 different fields involved in stroke cases. They will consider the problems of medical rehabilitation, social, educational and occupational rehabilitation, medical and surgical care, prevention of strokes, stroke research, community service, and professional education.

Dr. Frank H. Krusen, Minneapolis, is chairman of the conference, and Dr. Ralph De Forest, Chicago, is executive secretary.

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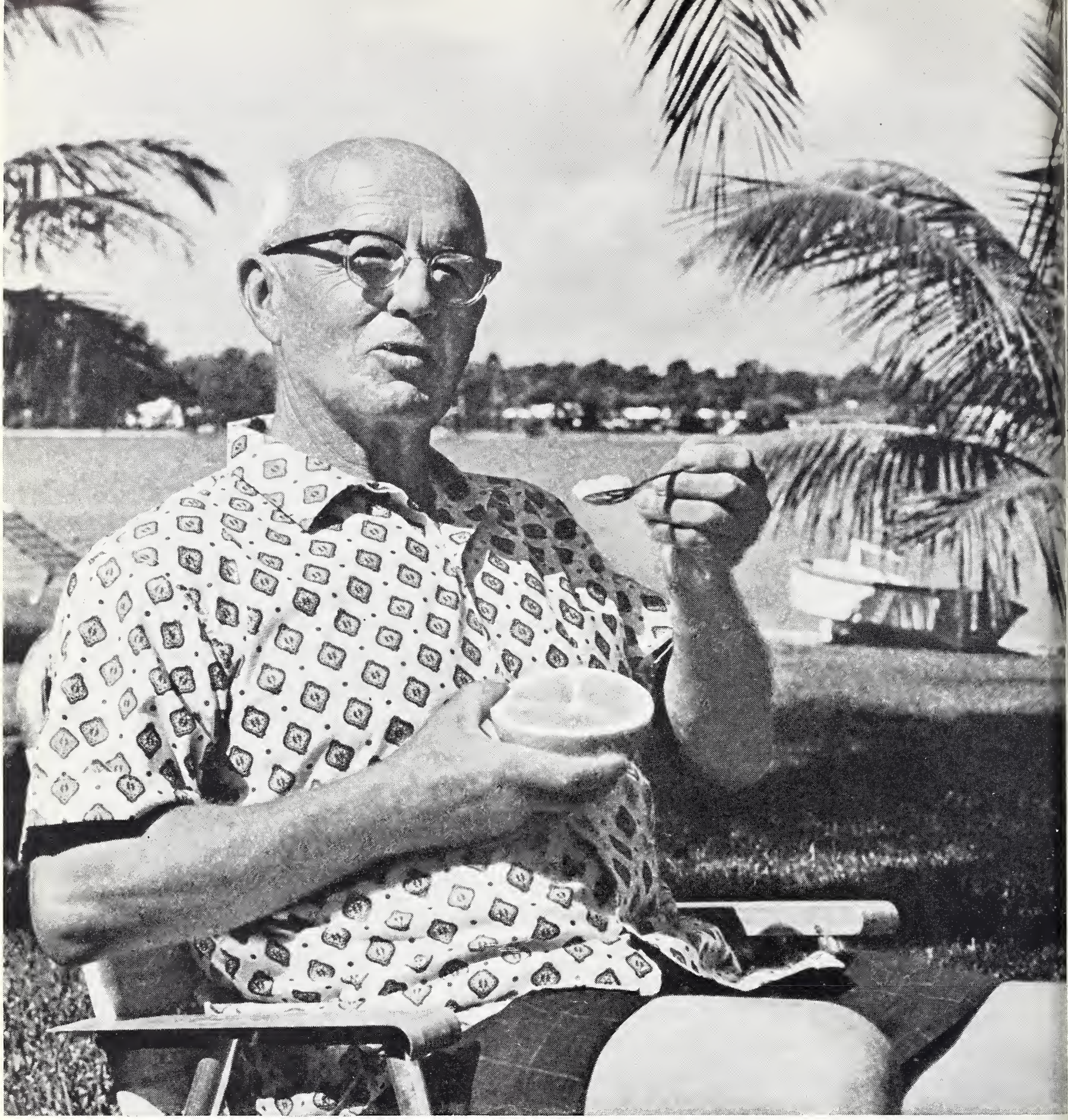
Manuscripts should be typewritten, double spaced on one side of the paper. Tables, charts, and tabulations should be submitted on separate sheets but their position in the text should be indicated. Authors are encouraged to limit bibliographies to 10 references, written in conformation to style utilized in scientific publications of the American Medical Association. Articles are accepted for publication on the condition that they have not been previously published and are contributed solely to this JOURNAL.

A thesis summary of 75 to 100 words must accompany each manuscript separately from the text. Figures and drawings are acceptable when prepared with black ink on white paper. Photographs for illustrations should be unmounted, untrimmed, glossy prints and all such material must be identified. No charges are made to authors for illustration engravings not exceeding four column inches per printed page.

Reprints may be obtained at cost from the association. The right is reserved to decline any manuscript for publication. Ordinarily, manuscripts submitted will be acknowledged whether published or not.



A few positions on the Medical Staff of the Kennedy Veterans Administration Hospital, Memphis, Tenn., are now available to physician applicants. These vacancies exist in the Medical Service, which includes Pulmonary Diseases, and General Medicine in the Admitting-Outpatient Service. Physician's salaries are commensurate with professional qualifications and experience. Board certification permits 15 per cent additional salary. V.A. benefits include family hospitalization plan, with medical and surgical coverage, Federal Life Insurance, periodic pay increases, regular working schedules, and liberal retirement factors. Interested physicians may write the Chief of Staff, Kennedy Veterans Administration Hospital, Memphis 15, Tenn.



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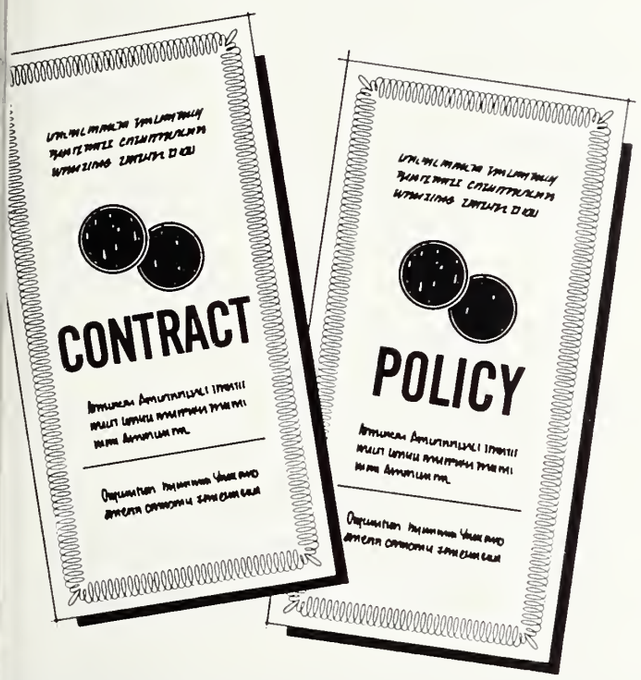
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52 Research Grants Made By Tobacco Industry Group

Fifty-two additional research grants for support of studies designed to give new leads to lung cancer and other health problems and a further increase in available research funds have been announced by Timothy V. Hartnett, chairman of the Tobacco Industry Research Committee.

The Scientific Advisory Board, which directs the T.I.R.C.'s research program, has now awarded 378 grants—181 initial grants and 197 renewals —to independent scientists in some 90 medical schools, laboratories, and hospitals throughout the country.

Mr. Hartnett said the committee also has appropriated an additional $800,000 for its research fund, bringing the total to $6,250,000. The T.I.R.C., organized in 1954 to support scientific research related to tobacco use, has periodically appropriated funds to finance all grants-in-aid recommended by the Scientific Advisory Board.

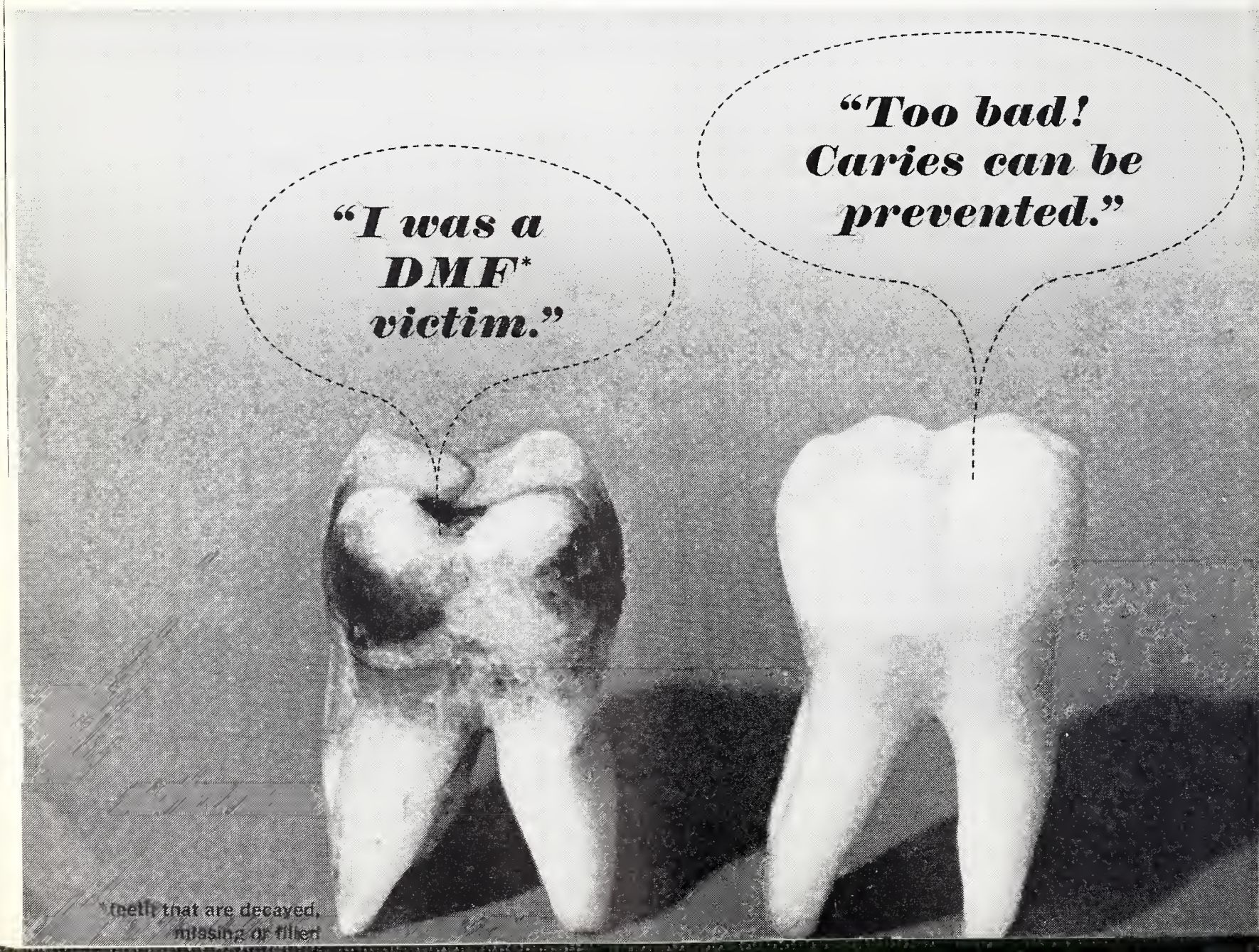
Dr. Clarence Cook Little, scientific director of the T.I.R.C., said 27 of the grants announced were for original research studies the Advisory Board hopes will produce new approaches and information related to lung cancer and other ailments. Among the new grants are projects dealing with the following:

—Causation of cancer by chemicals and viruses in germ-free animals.
—Social and psychological aspects related to cigarette smoking.
—Influence of certain environmental factors in the development of cancer in tuberculous patients and in children.
—Epidemiological factors in lung cancer.
—Effects of nicotine on protein and amino acid metabolism in humans.
—Vascular responses to tobacco smoking in patients with vascular disease.

Film on Voting Available from AMPAC

"The Velvet Curtain," a film on the personal responsibility of voting, is now available for showing at medical society meetings.

The film relates how a crusading newspaper editor decided to get the community's apathetic voters behind "the velvet curtain" to vote. He institutes a series of sharp editorials and feature



stories, without naming names, on community leaders and solid middle and upper middle class citizens who didn't bother to vote in the town's last election.

Produced by the American Good Government Society of Washington, D. C., the film was shown extensively throughout the United States prior to the November elections. Other cooperating agencies in the production were the American Medical Political Action Committee, Conference of State Manufacturers Associations, and the National Association of Manufacturers' Public Affairs Division.

The 21-minute, black and white movie may be secured from the American Medical Political Action Committee, 520 North Michigan Avenue, Chicago 11, Illinois.

American Thoracic Society Announces May Session

Scientific papers, round-table discussions, and luncheon seminars on clinical and laboratory work in tuberculosis and other respiratory diseases are being planned for three consecutive days at the Annual Meeting of the American Thoracic Society. The meeting will be held in Denver, Colorado, May 13 to 15, 1963, in conjunction with the 59th Annual Meeting of the National Tuberculosis Association. The ATS is the medical arm of the NTA.

In order to cover as many subjects as possible, a total of 10 "sandwich seminars" will be conducted at lunch time Monday and Wednesday, May 13 and 15.

Subjects to be discussed at the seminars include respiratory emergencies in the perinatal period, the meaning of pulmonary diffusing capacity, unclassified mycobacteria, primary drug resistance for tuberculosis, tuberculin testing, the management of the flail chest, and medical education.

Round tables will be conducted during the final period each afternoon. They will be on the airborne transmission of infections, retreatment of drug-resistant tuberculosis, etiological aspects of newer environmental lung disease, histoplasmosis, ventilatory assistance, and viral respiratory disease in man.

The Amberson Lecture, a special event of each ATS annual meeting, will be held at 11 a.m., Tuesday May 14, and will be followed by the annual business luncheon of the society. The lecturer has not been announced.

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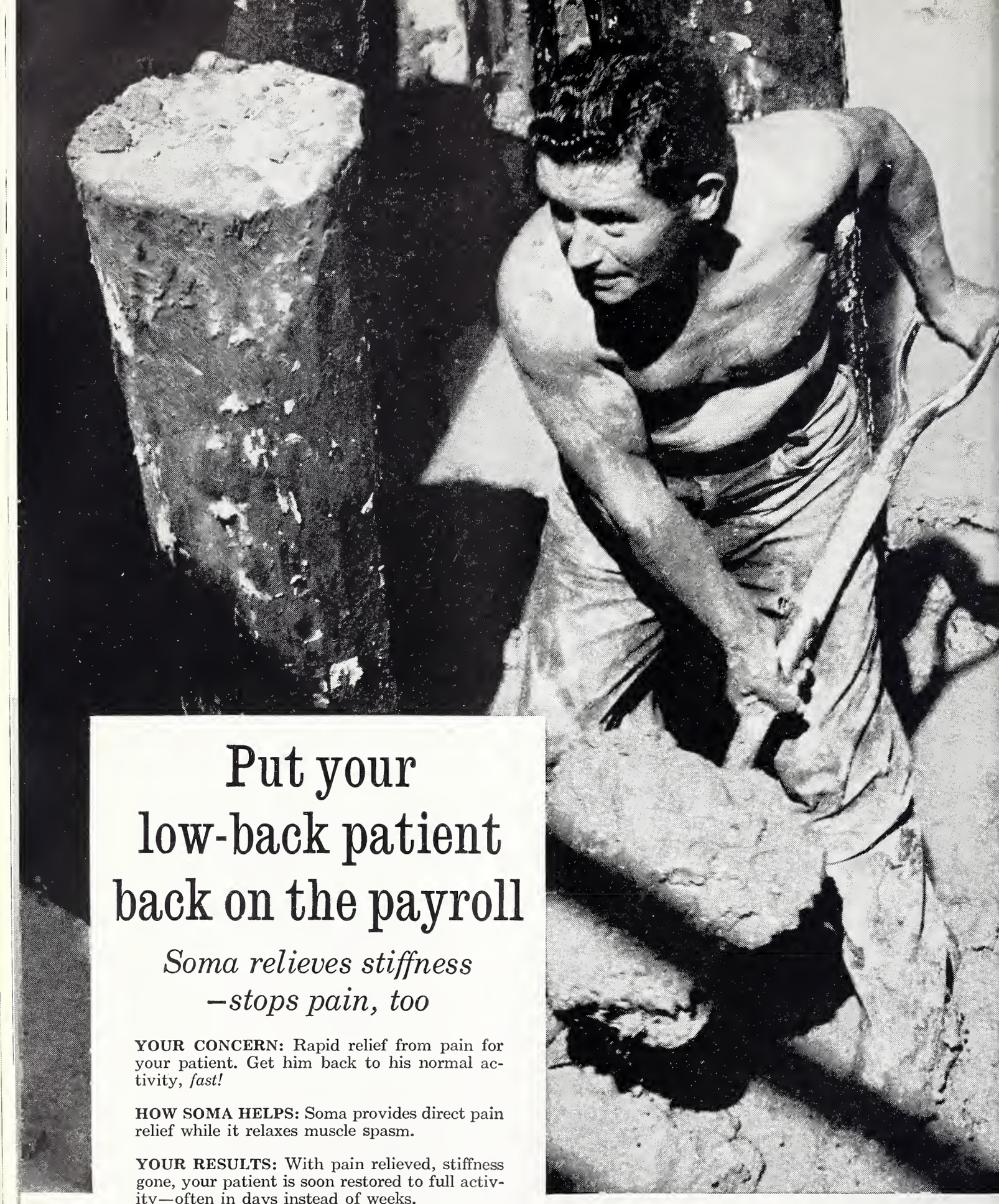


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JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
February, 1963, Vol. IV, No. 2

ORIGINAL PAPERS

The Role of Radiotherapy In the Management of Bronchogenic Carcinoma

BERNARD T. HICKMAN, M.D.
Jackson, Mississippi

Surgery continues to be the only definitive treatment for bronchogenic carcinoma, but about 75 per cent of the patients are found to have nonresectable tumors when seen. Irradiation therapy can play a significant role in palliation of certain histological types of nonresectable carcinomas and possibly help in rendering certain nonresectable cases resectable.

Bronchogenic carcinoma continues to increase in incidence at a relentless rate, causing more deaths than any other form of cancer in the adult male population.[1] This increasing incidence might not be so alarming if the cure rate were also on the increase, but this is not the case. Of every 100 patients diagnosed as having bronchogenic carcinoma only 25 are found to have resectable lesions when first seen, and overall only 5 to 10 survive five years. Many forms of therapy using various combinations of surgery, irradiation, and chemotherapy have been and are being tried, but analysis of cure rates has not as yet revealed a breakthrough for some particular therapeutic method other than surgery in early lesions.

From July 1955 through December 1959, 205 patients with bronchogenic carcinoma were treated at the University Medical Center and VA Hospital in Jackson. This does not include patients who were seen but not treated, or those in whom histologic proof of the diagnosis was not obtained. There were 148 white and 57 colored patients, with an average age of 58 years. Ten per cent of the patients were female, which is in keeping with reports from other centers. Of the 205 cases, only 92 (45 per cent) were considered to be operable, but at the time of thoracotomy only 51 (25 per cent) were actually found to be resectable.

Of the total 205 cases treated, 111 received cobalt-60 teletherapy irradiation. In 97 instances irradiation was the primary therapy employed, and in the remaining 14 it followed resective surgery. The average survival time of the inoperable cases treated with cobalt-60 irradiation was eight months. The histology of the specific type appeared to make some difference in the prognosis, as is noted in Table I.

The relatively longer survival time in the oat cell carcinoma group is based on only 13 cases, but similar conclusions have been made by other groups.[2, 3] The adenocarcinomas would appear to have the poorest prognosis with irradiation therapy. The great bulk of the tumors treated, how-

From the Department of Radiology, University of Mississippi School of Medicine.

ever, were of the epidermoid or undifferentiated type carcinoma.

It is thus apparent that in terms of length of survival, no form of therapy has much to offer in the nonresectable lesions. There are other things to consider, however, besides length of survival. Palliation is where irradiation plays its most

TABLE I

Histologic Type	*Average Postirradiation Survival Time*
Oat cell carcinoma	26 months
Undifferentiated carcinoma	13 months
Epidermoid carcinoma	6 months
Adenocarcinoma	4 months

helpful role in the management of bronchogenic carcinoma. Some of the palliative effects of irradiation are: (1) the relief of atelectasis due to tumor obstruction of a bronchus, (2) control of cough and hemoptysis, (3) relief of chest pain due to pulmonary-pleural involvement, (4) relief of superior vena caval and esophageal obstruction, (5) diminution of pleural effusion, and (6) relief of pain due to bone metastasis. In our series of cases, 60 per cent received good subjective or objective palliation for an average time of six months. Blanshard[4] reported an incidence of 83 per cent of patients receiving some degree of relief of symptoms following irradiation, and Guttman[5] reported 75 per cent subjective improvement following supervoltage therapy.

Figure 1A shows a patient with superior vena caval syndrome caused by an inoperable bronchogenic carcinoma. Figure 1B shows the same patient following a brief course of cobalt-60 teletherapy. The dots on the patient's chest outline the therapy port. Patients usually begin to obtain relief from the obstructive phenomena within a week to ten days after beginning irradiation therapy. Some observers report that nitrogen mustard therapy will cause as prompt or even more prompt response, but we have found that chemotherapy is of a more temporary nature, whereas the relief from irradiation is longer lasting.[6]

Figure 2A shows a chest x-ray of a patient with inoperable bronchogenic carcinoma in a location to cause superior vena caval obstruction. Figure 2B shows the chest film of the same patient following a month's course of cobalt-60 irradiation, with a marked decrease in the size of the tumor mass.

Figure 3A shows the chest x-ray of a patient with inoperable bronchogenic carcinoma causing obstruction of the left mainstem bronchus resulting in massive atelectasis. These patients are usually in severe respiratory distress and are good candidates for superimposed infection and abscess formation. If irradiation can be begun as shortly as possible after atelectasis has occurred, re-aeration is often dramatic and may occur in a matter of five to ten days. Figure 3B shows the chest x-ray of the same patient, following a course of cobalt-60 irradiation to the left hilar area, demonstrating re-expansion of the left lung. The tumor mass is now noted at the left hilum.

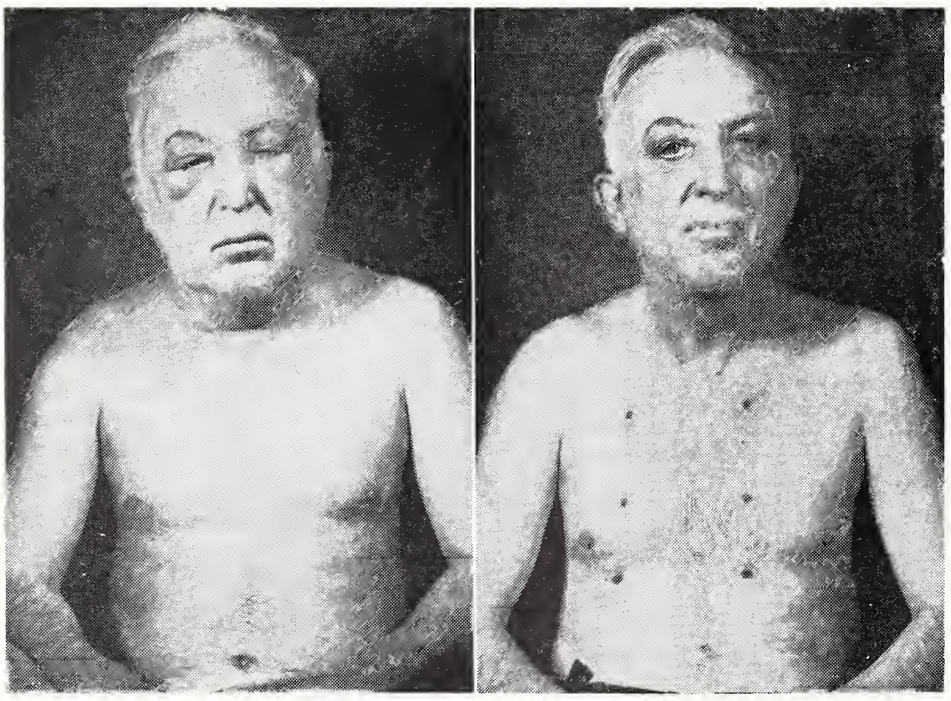


Figure 1A. (Left) Bronchogenic carcinoma with superior vena caval syndrome. Figure 2A. (Right) Superior vena caval syndrome after treatment with cobalt-60 irradiation.

Preoperative irradiation is being evaluated as a means of making nonresectable lesions resectable. Thompson[7] reported that 77 per cent of his operable cases were found to be resectable following preoperative irradiation, compared to a resectability rate of from 25-45 per cent of those cases not receiving

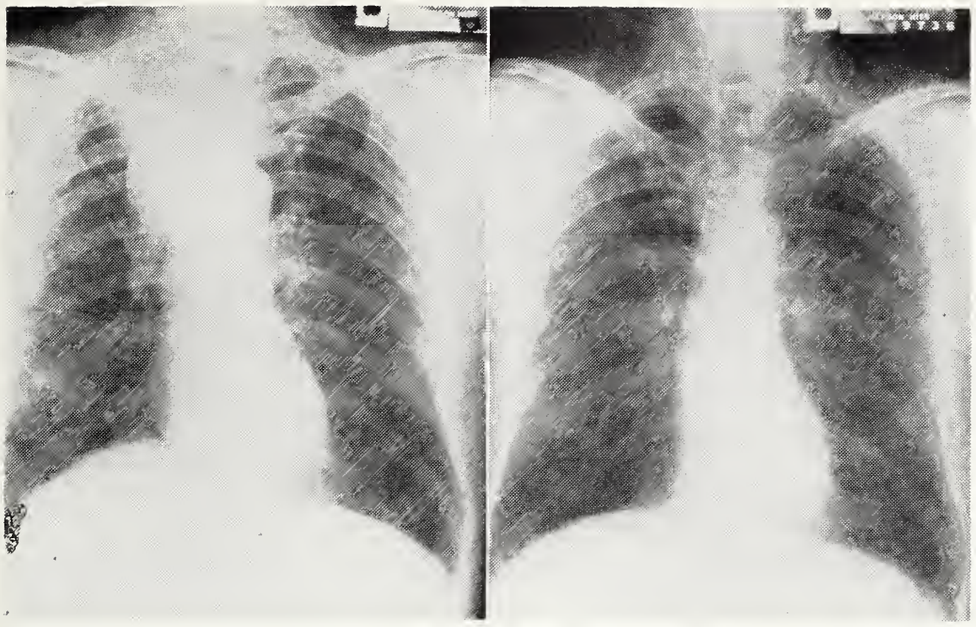


Figure 2A. (Left) Inoperable bronchogenic carcinoma in a location to cause superior vena caval obstruction. Figure 2B. (Right) Bronchogenic carcinoma causing superior vena caval obstruction relieved by irradiation.

preoperative irradiation. Bromley[8] reported on 66 patients who received preoperative irradiation. The pathological report following surgery revealed that 46 per cent had no evidence of tumor present. Bloedorn[9] has shown that the resectability rate after cobalt therapy is very high, that the primary tumor is "sterilized" in a high percentage of cases and that mediastinal lymph node metastases are "sterilized" in a considerable number of cases. Paulson[10] has shown in a limited number of cases that preoperative irradiation for superior sulcus tumors sometimes plays a part in making them resectable. This evidence suggests that there may be a trend toward the advocation of preoperative irradiation in a greater percentage of cases. Whether this will help in improving the overall cure rate can only be speculated. Our own experience in this area has been too limited to permit a comment.

SUMMARY

The average survival time in nonresectable bronchogenic carcinoma is in the neighborhood of eight months with any form of therapy. Irradiation does have a role in palliation, and at times may give dramatic relief of distressing symptoms. Preoperative irradiation therapy, in the hope that more lesions may be made operable, should be further evaluated. ★★★

2500 North State Street

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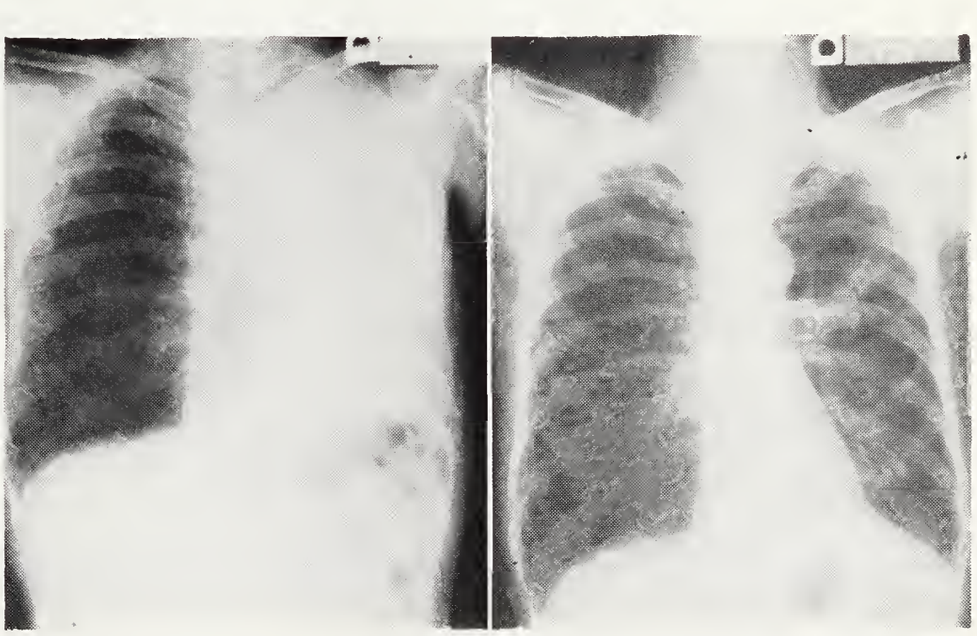


Figure 3A. (Left) Inoperable bronchogenic carcinoma with massive atelectasis. Figure 3B. (Right) Bronchogenic carcinoma following cobalt-60 irradiation for atelectasis.

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THE SANITARY C.I.A.

From Central Intelligence Agency "Relocation Bulletin 19," as conveyed by the *National Review*: 1. During the early stages of the move to the new building, toilet facilities will not be available at the new site. . . . 2. Personnel assigned to the new building prior to the activation of all toilet facilities in the building will be expected to make personal provisions consistent with personal comfort. . . . 3. For security reasons personnel will not frequent gasoline stations, restaurants, and other public facilities in the vicinity of the new building with the intent of utilizing such toilet facilities, inasmuch as this will attract undue attention to agency personnel. 4. Personnel are reminded that vegetation at the new building is U. S. Government property. Damage to or destruction of U. S. Government property is a Federal offense. Personnel are also reminded that some leaves of plants in adjacent wooded areas are harmful, such as poison ivy (3 leaves), poison oak, and poison sumac. Photographs of these plants will be posted at the main entrance to the new building at an early date.

The American Medical Association Study On Perinatal Mortality and Morbidity

HOWARD A. NELSON, M.D.
Greenwood, Mississippi

Begun in 1961 with a pilot investigation, the AMA Perinatal Mortality and Morbidity Study has three objectives: (1) research and investigation into the causes of infant mortality and morbidity, (2) education of physicians in regard to the problems involved and newly acquired clinical knowledge, (3) assistance to participating hospitals in analyzing their work. The University Hospital in Jackson was one of the 90 hospitals in the United States and Puerto Rico chosen for the pilot study. Mississippi now has a second participant in the project—the Mississippi Baptist Hospital in Jackson.

The author, who is a member of the Committee on Maternal and Child Care of the AMA Council on Medical Service, discusses the operation of the Perinatal Study and the data currently available.

THERE ARE NO TOTALLY reliable data on perinatal deaths and fetal wastage, but the practice experience of any physician rendering obstetrical or pediatric care should be sufficient to underscore the gravity of the problem.

Until maternal and perinatal mortality rates are zero, there will be ample reason for medical organization to devote a major effort to painstaking investigation into the cause of each such tragic occurrence. Wherever physicians are effectively organized for the advancement of medical science, a potential to meet this challenge exists.

AMA COMMITTEE

The Committee on Maternal and Child Care of the American Medical Association has for many years been investigating the problems relative to mothers and newborn babies in the United States. As a result of numerous meetings sponsored by this committee and in conjunction with a number of professional organizations and interested physicians across the country, a program of intensive investigation in the perinatal area was finally crystallized. A detailed plan of operation was developed and a pilot study proposed for the year 1961 in order to demonstrate the feasibility of a nationwide perinatal study. In June 1960, this program received the formal approval of the Council on Medical Service of the American Medical Association. Later in 1960, the American Medical Research Foundation, desiring to make the benefits of the study directly available to the American physician, provided initial funds to get the program underway. A major degree of support was received in the form of services and equipment from the Remington-Rand Univac Division of Sperry-Rand Corporation.

OBJECTIVES OF STUDY

The Perinatal Study has three primary objectives:

1. Research and investigation—detection of causes of maternal and infant morbidity and mortality.

2. Education of physicians—emphasizing of problems involved and rapid dissemination of newly acquired clinical research knowledge in a form which can be put into practical use.

3. Service—provision of useable material to participating hospitals in a form which will encourage them to maintain effective perinatal review committees.

Member, Committee on Maternal and Child Care, Council on Medical Service, American Medical Association.

Read before the Section on Pediatrics, Mississippi State Medical Association, 94th Annual Session, Jackson, May 7-10, 1962.

The Advisory Board of the Perinatal Study believes that the most effective application of its studies will occur in those hospitals where there is an active Perinatal Committee. This will permit direct clinical use in each hospital of the newest techniques and at the same time permit an accurate self-appraisal of each hospital's problems.

The study program has been designed to pinpoint major problems in the perinatal area and to make intensive investigation into various clinical entities. Education is accomplished by bringing these facts to the awareness of the participating physicians and indoctrinating them into the important technique of self-evaluation. Lastly, the program provides a very special service to participating hospitals in offering analysis of their work in a form which is not practical to routinely accomplish in each institution.

It is believed that diligent application of these three primary functions will produce a significant reduction in maternal and infant mortality and morbidity. The Advisory Board is convinced that the most significant result in the improvement of the medical welfare of mothers and babies will come from critical self-evaluation by physicians in their individual hospitals. It is here that the individual details of difficult problems may be discussed frankly as they apply in each separate hospital.

OPERATION OF STUDY

The Perinatal Study operates by distributing code sheets to all participating hospitals. A code sheet is completed for every baby born in the individual hospital. This completed code sheet contains detailed information on both mother and baby. A carbon copy of the original is returned to the headquarters of the Perinatal Study for processing. Here it is converted to punch cards and then transferred to magnetic tape for additional handling. Suitable controls are maintained in order to insure a reasonable degree of reliability. The data is then accumulated and distributed back to the participating hospitals at regular intervals.

Tabulations are returned in a three-fold form: the values of the data studied for the entire nation, those of the region in which the hospital is located, and the individual hospital statistics. This permits each staff to carefully evaluate its own work, in view of the two other yardsticks provided for comparison. Complete anonymity of the individual hospitals and the participating hospitals is guaranteed. In addition, for those hospitals who desire to do further processing of their own work, duplicate decks of punch cards are provided at the end of the year at no charge. This entire service is made available to participating hospitals without any financial obligation.

PILOT GROUP

The initial study group consisted of 90 hospitals distributed over 34 states and Puerto Rico. Hospitals were picked to represent various types of institutions in order to determine the administrative difficulties involved in the program. Some were picked because of geographical distance in order to explore the problem of mailing techniques involved in communicating with hospitals that are far away. The initial program enrolled hospitals who, all totaled, had approximately 150,000 deliveries a year. This estimate was quite good for the annual tabulation for 1961 was 150,228 deliveries. This data has all been received, converted to punch cards, and is now being computer analyzed. The data collected for the year 1961, while a pilot study in nature, is probably the largest collection of this type in existence.

The committee, with full knowledge of the limits of statistical reliability which can be placed in the pilot project, feels that the material now available will offer an excellent start in pointing out problems of "pregnancy wastage" and in pinpointing areas in which future investigation is necessary.

Several interesting items have already been demonstrated in the early analysis of the data for 1961. From the information previously available on infant presentation, one might expect that of full term neonatal deaths, 4 per cent would be delivered via the breech route. However, the current study indicates that 12 per cent of full term neonatal deaths were delivered via the breech route. This would suggest that this area warrants considerable investigation. We have observed that supplying the participating hospitals with lists of their perinatal deaths has brought some unusual responses. Hospitals were not aware of the significance and size of their own problems. This program has permitted them to take a new look at the scope of the problem and the situations involved.

From the tabulation for 1961, it would appear that 270 infants, weighing over 2,000 gm., were admitted alive in utero to the hospital, but died before or during delivery. Interpolating this information for the United States means that at least 7,500 babies in this category die per year.

This is an immense problem which we hope to explore in great detail.

PROGRAM NOW OPEN

Invitation is now extended to hospitals who are interested in this program and have the ability to participate. Hospitals accepted into the program must (1) be accredited by the Joint Commission on Accreditation of Hospitals, (2) have 500 or more deliveries a year, (3) have a functioning perinatal study committee, (4) have a responsible record room librarian, and (5) maintain a delivery room log book. In addition, certain other hospitals may be admitted to the program, at the discretion of the Advisory Committee.

It is hoped that the Perinatal Study will produce, by means of its techniques and application of data acquired, an effective reduction in both maternal and infant mortality and in morbidity rates. A reduction in the neonatal mortality rate of 3 per 1,000, as a result of this program, can save between 13,000 and 15,000 infants each year. Equally important, is the reduction in number of infants who survive delivery but are nonproductive or disabled during the course of their natural life. ★★★

308 Fulton Street

A PROFITABLE DELUSION

A woman visited a psychiatrist and pleaded: "You have to help my husband. He has delusions and thinks he's a horse."

After subjecting the patient to extensive tests, the psychiatrist said to the woman: "I think I can cure your husband, Madam, but it will cost a lot of money."

"Oh, money is no object," she quickly replied. "He just won the Kentucky Derby."

Case Report VIII of the Maternal Mortality Study: Placenta Praevia

RALPH L. BROCK, M.D.
McComb, Mississippi

Case Report VIII of MSMA's Maternal Mortality Study involves a direct obstetrical death due to hemorrhage from placenta praevia. The case history is reported, and the evaluation of the Committee on Maternal and Child Care is given on the four points of adequacy of data, cause of death, avoidability, and responsibility.

THE FOLLOWING case report, presented by the Committee on Maternal and Child Care, represents death from hemorrhage due to placenta praevia complicating delivery.

CASE NO. 296-14710-62

This is a 20-year-old white female, gravida 2, para 1, with an expected date of confinement in early December 1961. Her previous pregnancy was uncomplicated and resulted in the birth of a live, 7 pound, 8 ounce infant. She was first seen during this pregnancy at about 30 weeks of gestation, and a total of ten prenatal visits were made. Laboratory examination showed the hemoglobin was 11 gms. and the blood type was A, Rh-positive. Serological examination was negative.

She was admitted to the hospital on the morning of Dec. 5, 1961. Because of poor progress in labor, x-ray examination was ordered. This consisted of a single anteroposterior view of the pelvis that showed a single uterine pregnancy at or near term with cephalic presentation. The maternal pelvis appeared "grossly adequate." A vaginal examination revealed the cervix was dilated 2 to 3 cm., the membranes were intact, and no placental tissue was felt behind the bag of waters.

Demerol, 100 mg., and Scopolamine, 1/150 gr., were given at 11:00 a.m. Approximately 11 hours after admission, the membranes ruptured spontaneously, accompanied by massive bleeding. The cervix was 3 to 4 cm. dilated and placental tissue was stated to be protruding from the vagina. Consultation was obtained with another physician and an immediate cesarean section was performed under spinal anesthesia. Pontocaine was used in a dosage of 9 mg., and a live infant was delivered. The patient was given 2,000 cc. of blood, but the time at which this was started was not stated. The patient died after cesarean section and the cause was listed as "irreversible shock during surgery." An autopsy was done, but the report was not available for this review.

General Practice Member, Committee on Maternal and Child Care.

CASE REVIEW

This case was reviewed by the Committee on Maternal and Child Care at its regular quarterly meeting and the following evaluations made:

I. Adequacy of Data. The data obtained in this case were rated 3 on a scale of 1 (minimal) to 5 (completed data sheet, relevant explanatory note, and autopsy report).

II. Cause of Death. This was considered to be a direct obstetrical death due to hemorrhage from placenta praevia.

III. In ascertaining avoidability, the committee, following the AMA Guide for Maternal Death Studies, assumes: (1) that the physician possessed all the knowledge currently available and relevant to the factors involved in the death, (2) that he had a high level of technical ability by experience, and (3) that he had available to him all the facilities present in a well-organized and properly equipped hospital.

It is realized that these are extremely strict criteria and that a majority of maternal deaths occur under far less ideal circumstances. However,

if maternal care is to improve, a high standard must be maintained. On this basis, the committee felt that this death was avoidable.

IV. Factors of Avoidability. If the death is considered avoidable, an attempt to assign factors of avoidability to the physician, hospital, patient, or a combination of these is made.

It was believed that the responsibility was due primarily to physician factors—mainly the choice and handling of anesthesia and the delay in making a correct diagnosis of placenta praevia.

DISCUSSION

From the available information the committee was unable to determine the exact cause of death. The importance of a precise record of the events immediately preceding a maternal death cannot be overestimated. It seemed reasonable, however, to presume that death occurred as a result of profuse hemorrhage during and after cesarean section. Two main points in connection with this case appear evident.

The first concerns making the correct diagnosis of placenta praevia as early as possible. It is apparent that the attending physician was concerned about the progress of labor in this case because he ordered an x-ray examination. One anteroposterior view of the pelvis is not considered adequate for pelvimetry or to determine the presence of a placenta praevia. A lateral view plus a cystogram may well have shown definite evidence of a low-lying placenta early in labor, and there would have been adequate time to prepare the patient for surgery.

The second point concerns the choice of anesthesia in a patient who was obviously bleeding profusely. We do not know when blood was started in this case. However, if 2,000 cc. were given, then the hospital apparently had access to adequate amounts of blood for emergency cases. A general anesthesia using an agent such as cyclopropane is generally considered the method of choice in such circumstances. Even more important than the agent itself, however, is skillful anesthetic management. Unfortunately, we are unable to determine how much effect the anesthetic had in causing the profound shock that occurred after operation. Also it would have been helpful to have had the report of the autopsy in this case.

SUMMARY

(1) A maternal death is described in which hemorrhage from placenta praevia appeared to be the major cause of death.

(2) Problems connected with early diagnosis of placenta praevia and choice and management of anesthesia for cesarean section in the presence of severe bleeding and impending shock are discussed.

★★★

320 Delaware Avenue

NO IMMUNITY

It so happened that Eastern Air Lines was on strike when the smallpox victim arrived at New York's Idlewild International Airport, causing anxious moments for the giant metropolitan population. As to the union striking against Eastern, it's a wonder that they didn't get their pickets pocked.

—James Ward, *Jackson Daily News*

Radiologic Seminar X: Studies of the Chest in Sarcoidosis

JAMES M. PACKER, M.D.
Jackson, Mississippi

THREE MAIN GROUPS

SARCOIDOSIS MAY BE DEFINED as a disease entity characterized pathologically by a noncaseating granulomatous lesion which may involve virtually any tissue in the body but most commonly is found to attack the lymph nodes and the lungs.

In the area of diagnosis, roentgen studies are of prime importance. Since intrathoracic involvement is found in around 85 per cent of cases, chest roentgenograms are indicated both as an aid in identification of the disease process and as a method of following the clinical course.

Generally, the chest radiographic findings can be divided into three main groups, based on an analysis by Hinshaw and Garland[1] of over a hundred cases:

1. adenopathy (hilar and commonly right paratracheal nodes)—32 per cent,
2. adenopathy plus parenchymal changes—42 per cent,
3. parenchymal lesions alone—23 per cent.

They noted parenchymal nodular lesions varying from miliary size to considerably larger nodules. Linear shadows progressing to varying degrees of coalescence are the other general type of lesions. The nodular shadows are due to aggregations of sarcoid granulomata whereas the linear densities are associated in various stages with lymphangitis, lymphedema, or congestion. In later stages fibrosis and associated emphysema may be the predominant feature. Lymphadenopathy ranges from the barely perceptible to the more commonly recognized massive enlargement of hilar and paratracheal nodes.

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From the Department of Radiology, Mississippi Baptist Hospital.

Three cases are presented to demonstrate the principal radiographic features:

Case I. A 14-year-old asymptomatic white female was noted to have an abnormal chest x-ray when she was given a food handler's examination. Her chest film (Figure 1) showed marked enlargement of hilar and mediastinal nodes with no demonstrable lung lesions. Scalene node biopsy revealed a noncaseating granuloma compatible with sarcoid. She was discharged still asymptomatic with no treatment planned.

The findings in this patient are illustrative of the large group where demonstrable chest pathology is limited to lymph node enlargement. Another striking feature, common to many sarcoid patients, was the lack of symptoms in the face of rather massive lymph node enlargement.

Case II. A 29-year-old Negro female complained of a dry, hacking cough for two months. A chest film (Figure 2) revealed large hilar and mediastinal nodes with an associated confluent infiltrate in the right base. Scalene node biopsy showed noncaseating granuloma. She was released on a course of cortisone and has shown improvement subjectively and by x-ray.

This case is an example of combined lymph node and parenchymal lesions. The paucity of symptoms associated with obvious chest film findings is again noted. Statistically, sarcoid is more common in the Negro than the Caucasian race.

Case III. A 33-year-old white male was first admitted complaining of weakness, weight loss, and night sweats. There was a ten-year history of a clinical diagnosis of sarcoidosis, this being first made when the patient was in the army. Inguinal node biopsy was compatible with sarcoid. Chest films (Figure 3) showed a predominantly parenchymal lesion with miliary and nodular densities

being generalized with interspersement of linear type shadows. A good symptomatic response was obtained after cortisone administration.

This case is an example of the group of predominantly parenchymal lesions. The long history



Figure 1

of unpredictable periods of progression and remission of the disease process is another commonly found clinical feature.

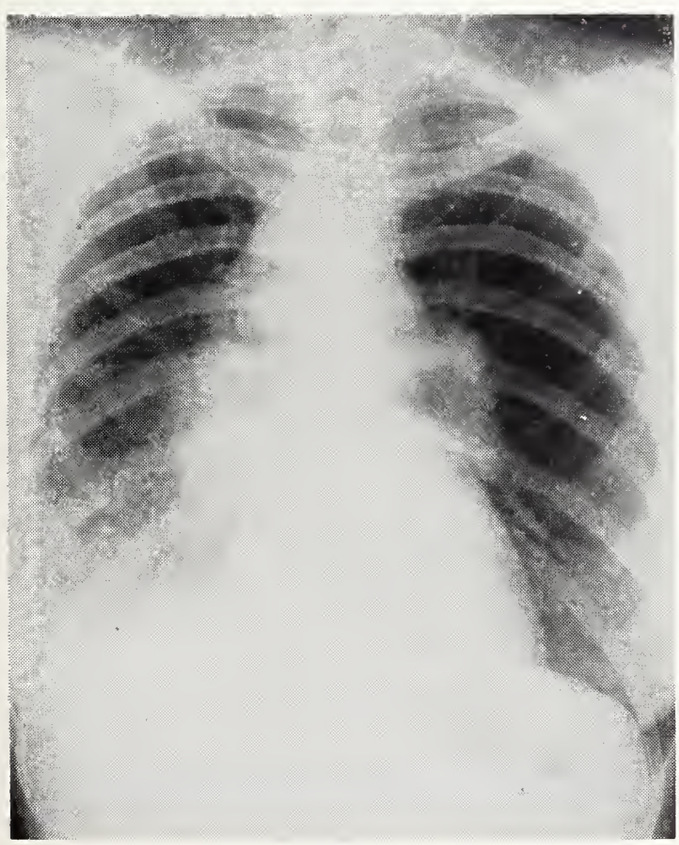


Figure 2

From the aspect of clinical and radiographic correlation several points are worthy of emphasis:

1. The finding of a significant degree of parenchymal and mediastinal disease in a relatively asymptomatic individual may be the first indication of the presence of sarcoidosis.

2. Tuberculosis may complicate sarcoid in from 15 to 25 per cent of the cases.

3. Pleural effusion is quite rare even in instances of widespread disease.

4. Paralleling the commonly benign course of this disease process, long-term follow-up examina-

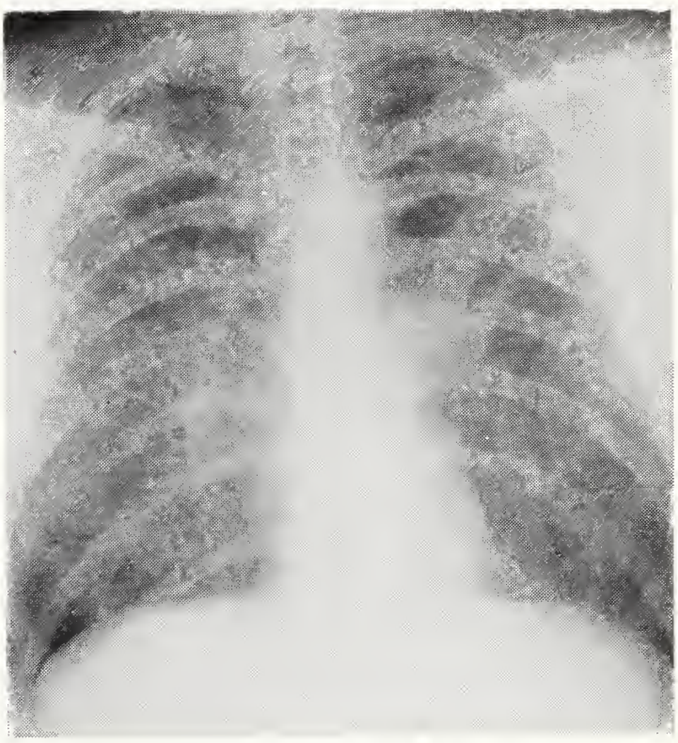


Figure 3

tions by chest films will show regression in about half the cases, persistence of abnormalities without symptoms in about 25 per cent, and progressive symptomatic disease in around 25 per cent or less.

5. Finally, in spite of the most suggestive x-ray findings, the diagnosis must rest with clinical correlation and histological vertification, usually by lymph node or skin biopsy. ★★★

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Medical Observations on Contact Lens Fitting

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The first functional contact lens was designed by a German ophthalmologist, Dr. Saemish, in 1887. The lens was not an optical device, however, but was constructed to protect the remaining eye of a monocular patient suffering from exposure keratitis. The patient successfully wore the thin glass shell covering the cornea and sclera for 20 years. The first refractive lenses were designed by a Swiss ophthalmologist, Dr. A. E. Fick and were produced in 1888. Various other ophthalmologists experimented with ground glass contact lenses but with mixed success. Then in 1948, Kevin Tuohy devised a corneal lens which was somewhat smaller than the corneal diameter. Plastic composition resulted in a light enough lens so that it could be held in place by capillary attraction. Modifications of this lens are the ones used today.

In this paper, the author discusses the indications for contact lenses. He lists the advantages and disadvantages and considers the fitting of contact lenses.

SINCE WORLD WAR II optical technology has led to remarkable improvements in the design and fitting of contact lenses. Fitting, which formerly required topical anesthetics and the supervision of an ophthalmologist, is now performed with little relative discomfort. A multimillion dollar contact lens business has been established with the dissemination of an enormous body of information—mostly promotional. As a matter of fact, the Federal Trade Commission has instituted proceedings against certain misleading advertisements, i.e., "Take off your glasses and see better," "Now all day comfort," "Ideal for all ages," "You can wear circle air contact lenses no matter what your present visual problem." Every ophthalmologist has been questioned about the safety or advisability of contact lenses or whether various members of the family can wear them. It is the purpose of this paper to present certain personal observations and opinions formed in six years of contact lens fitting.

INDICATIONS

What are the indications for contact as opposed to forward lenses? These may be roughly divided into psychological vs. organic categories which overlap since vision is an interpretive or cerebral phenomenon.

PSYCHOLOGICAL CATEGORIES

Refractive: The correction of refractive errors accounts for the great majority of lenses fit. Of these, the young myopic patient (greater than −1.50 D) leads in lens acceptance and motivation. With the psychological benefits of excellent vision without spectacles accrues also improved peripheral and, occasionally, improved central visual acuity. Ten per cent increase in retinal image size is obtained in the myope and in the higher degrees of myopia may result in a significant improvement. Hyperopes, on the other hand, have a slightly decreased visual acuity which, coupled with the increased contact lens weight, somewhat reduces their acceptance. The lower astigmates do fairly well, but those with high degrees of astigmatism (greater than 3 D) show a decreased success rate. Bifocal contact lenses are poorly tolerated in general though somewhat better by the patient previously adjusted to monocular contacts.

Cosmetic: Cosmetic lenses may quite efficiently camouflage ocular blemishes such as unsightly scars and opacification. If useful visual acuity is present, the lens may have a clear pupillary portion with the periphery painted to match the nor-

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mal iris. If the unsightly eye is a blind one, however, a corneal-scleral shell may be employed to cover the visible portions of the eye.

Vocational: Because of lens fogging, some surgeons and dentists find contact lenses most advantageous. Athletic and theatrical personnel likewise find lenses desirable. Frequently, athletes will require a tighter pair of lenses for contact sports and a second pair for full time wear.

ORGANIC CATEGORIES

The visual acuity in corneal diseases as keratoconus, corneal scarring, and opacification may be remarkably improved. Symblepharon secondary to chemical burns may be prevented by a combination of local therapy and corneal-scleral lenses. Patients suffering from aniridia or other defective iris shutter mechanisms are excellent candidates for the type of lenses with a peripheral opaque doughnut. The artificial pupil formed may, by excluding excessive light, not only improve the patient's visual acuity but materially increase his comfort. Aphakics, binocular and monocular, are in selected cases grateful for the advantages of contact lenses. In general, the lenses should not be fitted until stabilization of the keratometric findings occur. This is usually from three to six months after surgery. Younger aphakics are more highly motivated than elderly so that clinical judgment must be exercised in patient selection. The high myopia produced by spherophakia and microphakia may likewise be benefited.

Incapacitating loss of central visual acuity may result from such macular diseases as chorioretinitis, macular degeneration, or macular cystic disease. Again in selected cases, telescopic magnification employing a high minus contact lens with a high plus objective spectacle lens may result in a remarkable improvement in visual acuity. About 2½ power magnification may be obtained. I have had experience with this device with only one patient, a young man with bilateral congenital optic atrophy and a visual acuity of 20/200. This patient's visual acuity was improved to 20/80 with a high minus lenticular lens and a high plus spectacle lens. Unfortunately, the resultant improvement was not deemed sufficient for practical wear in his case. In retrospect, it is probable that this application should be limited to visual acuities not worse than 20/80 or so because of the built-in limitations of focal length.

Middleton[4] has presented an excellent case report of the successful fitting of a partial albino child with contact lenses. It is suggested that fitting be employed before the age of six so that maximum visual acuity and minimal ocular nystagmus be obtained.

PRELIMINARY TALKS

Methods of fitting vary but should in all instances be preceded by a candid discussion. At the time of or before the initial examination, I find an orientation period desirable. The parents should be included if the patient is a minor. The advantages of contact lenses are all too obvious. The difficulties and disadvantages, however, are seldom appreciated. Most patients are certain that they have the will power and tenacity required for successful wearing.

An additional prerequisite is that of leisure time during the initial adjustment. Many patients find that detailed close work for the first week or two is quite difficult. Those students following an exacting homework schedule, CPAs in the tax season, or others undergoing rigorous periodic visual requirements can expect more difficulty at that time. It is my impression that the scheduling of the initial adjustment period in a less hectic season, for example, vacations for students, materially increases the acceptance rate.

Though technically the lenses can be fitted at almost any age, I limit the cosmetic lenses to patients 15 years or older. This I feel advisable for several reasons. First of all, the axial refractive error does not usually become stable until about this time. Nonauthoritative sources have claimed that contact lenses arrest myopia though I personally have observed further myopic changes. Those refractive errors which do not appear to change are probably on the basis of a mechanical splinting of the cornea by the semi-rigid lens. The removal of a full time wearer's lenses for 48 to 72 hours will allow the cornea to assume its unsplinted position.

Optically, a 1/10 mm. difference in radius equals .50 diopter change in power. Thus a very slight flattening of the cornea can appreciably reduce the myopic refractive error. Most ophthalmologists have had the experience of one of their patients telling them that they had noticed their visual acuity was much improved without either the lenses or their spectacles. This also is secondary to mechanical flattening and is a temporary phenomenon.

It is interesting that the accepted method of fitting contact lenses in 1956, when I first started, was on the basis of 2 to 3 diopters flatter than K (the flattest curvature of the cornea). Increased patient acceptance occurred, however, when several years later fitting parallel with K was begun. Those patients who had tolerated the flatter than

K lenses experienced no harmful results. Nevertheless, I feel it wiser to minimize this flattening of the cornea by the delayed fitting of the lenses. While 15 is an arbitrary age, comparison of the cycloplegic refractive errors in recent years would suggest optimal time for fitting.

Other reasons for using this as a minimum age have to do with maturity, intelligence, and general sense of responsibility. These characteristics cannot be measured but must be estimated by clinical judgment. Questioning the patient as to why he wishes contact lenses is an excellent source of such judgment. Not only can any misapprehension be dispelled, but insight into the patient's depth of thought and maturity may be gained. Lenses desired purely for contact sports must be fitted somewhat tighter than those for general use. It is only an occasional patient whose fit is tight enough to prevent dislodgement but loose enough for full time wear. In general, athletes must be cautioned that a second pair of lenses may prove necessary. The young person who is conversant with both successful and unsuccessful contact lens wearers is usually a good candidate. The bored or blasé individual is generally unprepared for the immediate sacrifices involved. Highly strung and emotionally unstable candidates are usually unsuccessful wearers.

METHOD OF FITTING

Following the preliminary talks, a routine examination is performed. This includes cycloplegic refraction, accurate muscle balance, slit lamp examination of lids, conjunctiva and anterior segments with particular attention to the cornea, and ophthalmoscopy. Tonometry is performed following cycloplegia on patients over 25.

Special requirements are horizontal measurements of the cornea and measurement of the corneal curvature with the keratometer.

Information necessary to the contact lens laboratory includes type of lenses desired, spectacle correction with vertex distance, keratometer readings and corneal diameter on the horizontal plane. A six-month replacement warranty is likewise secured for the patient so that the first loss within a six-month period can be restored.

The lenses I use are of the micro-type, i.e., smaller than the corneal diameter, and with three inner curvatures. These comprise a central optical zone, an intermediate curve, and a peripheral curve. The diameter of the lens varies with the corneal diameter but is usually between 9.6 and 10 mm. The lenses are examined following their arrival for flaws, dioptic power, and radii of curvature.

The initial fitting requires approximately two hours. If possible, a morning appointment is given and the patient cautioned to observe a reasonable bedtime. Following his being made comfortable at a low table, a short preliminary examination of the eyes is performed. On at least one occasion the candidate presented with a conjunctivitis which required rescheduling. The patient is then instructed to look downward, is cautioned against squeezing the lids, and the lenses are inserted. Generally rapid adaptation occurs so that the following hour to an hour and half is spent in explaining the do's and do-not's of contact lens wear, while the patient becomes accustomed to the sensation of the lenses.

Particular emphasis is placed on the hygienic care of the lenses and the dangers of infection. In the event of conjunctivitis, hordeola, or any suspicious discharge from the eyes, the lenses are to be removed and the patient is instructed to report for treatment at once. Normal adaptive symptoms are explained so that the patient understands that scratching and tearing are to be expected for the first several weeks. Any real pain, however, should require removal of the lenses, and if this does not relieve the pain, the patient is to report immediately for examination. Visual blurring, despite the lenses or spectacles, which does not clear within one to two hours is likewise a signal for ophthalmic investigation.

Two contact lens practices are strongly condemned. The first of these is the preliminary insertion of the lens into the mouth before the eyes. The mouth is, of course, a prime source of contamination with such organisms as pneumococcus, alpha hemolytic streptococcus, and Vincent's organism. Despite the specific warning, from time to time a few of my patients have admitted to the above actions.

A second illogical action is that of sleeping while wearing the lenses. To my knowledge, only one of my patients, a teen-ager, has so experimented. This followed a high school science class talk by a contact lens practitioner advocating full time wear. She discontinued this with no harm three weeks later when I first learned of her action.

Two methods of wearing while sleeping have been described. The lenses may be either worn in their normal position on the cornea or else pushed into the conjunctival fornices, at time of retiring.

A Japanese ophthalmologist, Magatani,[3] has reported a series of experimental cases involving

full time wear. Though epithelial erosion persisted in several of his patients, they were nevertheless allowed to continue their full time wear. Certain of the group have worn their lenses full time for several years without apparent damage. While it is obviously possible for selected patients to wear the lenses full time, I do not feel that justification exists at the present time.

Returning to the fitting routine, the visual acuity is recorded and the lenses are removed after one to one and one-half hours wear. The corneas are then examined for damage. This is rarely present during the initial period and the remainder of the first fitting is utilized for instruction in inserting and removing the lenses. Patience is emphasized since injury during lens insertion is rare in the calm patient.

A wearing schedule is then issued the patient depending on his initial tolerance of the lenses. Usually, this consists of two hours with thirty minute daily increases in consecutive wearing time. Following completion of scheduled wearing and an hour rest period, additional wearing is allowed if no irritation of the eyes is present.

Young people in particular must be warned against wearing their lenses longer than their scheduled wearing time. Adherence to scheduled wearing time rarely results in difficulty but the overenthusiastic patient not infrequently develops severe temporary edema and ocular discomfort.

Return visits are generally required in seven to 14 days. The visual acuity is recorded as well as lens movement and the riding position of the lenses. Sterile fluorescin is instilled and the tear pattern beneath the lenses is studied by cobalt light. Following lens removal the cornea is examined minutely by slit lamp for any break in integrity of the corneal epithelium. Areas of epithelial edema are carefully charted and the patient is questioned on length of time required for spectacle blur to clear. The length of time the patient has worn his lens the day of the examination as well as the previous day is recorded.

At future visits, refraction is performed over the lenses. Any appreciable difference in dioptic power necessitates changing the lenses but very slight differences are retained. Not infrequently, slight variations in visual acuity between the eyes may occur. The tolerance of manufacture of the lenses and the variability of precorneal tear-film make changes less than .50 D impractical. Occasionally lenticular astigmatism may be detected by retinoscopy and refraction. If of low degree, i.e., less than .75 D, usually correction is not necessary from either a symptomatic or visual standpoint.

Frequent slit lamp findings are those of epithelial edema or bedewing, epithelial erosion, and golf-ball type of edema associated with CO_2 bubbles. Moderate degrees of the above are symptomless in most patients and are usually visible only to biomicroscopic examination.

Epithelial bedewing is frequently transient, disappearing as increased wearing periods are attained. In my experience, it usually precedes neither erosion nor the CO_2 bubbles and may represent Sattler's veil described by earlier ophthalmic literature. Such bedewing is present, of course, normally in the peripheral cornea.

Epithelial erosion may occur from fine sublenticular foreign bodies or from the abrasive action of the lenses themselves. Abrasion of the lenses results in areas of epithelial erosion representing pressure points and necessitates modification of the lenses. One or two discreet microscopic erosions are usually resultant from small foreign bodies and disappear within a few hours following removal of the lenses. An interesting type of snake's trail in the sand occasionally is found representing the path of a rolling foreign body beneath the rotating lenses. Any partially imbedded foreign bodies should be removed following topical anesthesia and the lenses omitted for 24 hours. They usually consist of very fine silicon particles which can only be seen and removed by slit lamp observation.

CO_2 bubble formation may be present centrally or peripherally and represents areas of interference with corneal metabolism. These are the so-called tight signs and likewise require lens modification. Tiny bubbles first appear followed by coalescence into larger bubbles. These indent the epithelium into a golf-ball pattern which initially does not stain with fluorescin but later may do so.

Re-examination is recommended at six-month intervals for most patients but with shorter intervals for some. This examination is conducted similarly to the follow-up examination previously described. The contact lens patient is never discharged as long as he wishes to wear his contact lenses. Occasionally after even several years of wear, corneal changes may occur necessitating some further lens modification.

STATISTICS

Statistically, young teen-agers, ages 15-19, enjoy the highest rate of success, with females achieving a more rapid and extended wearing time than males. There is an estimated 90 per cent success rate in selected teen-age girls. Young unmarried adults are second with married adults a poor third. In all categories women adjust much more

readily and satisfactorily than men to contact lenses. As previously described, myopic patients greater than −1.50 D tolerate their lenses better than hyperopic patients, and those with greater than 3 D of cylindric correction can expect greater difficulty. Presbyopic patients I have discouraged.

In the routine screening examination, patients with hyperemic eyes from any cause, squamous (infectious) blepharitis, severe ocular allergy, past history of herpes simplex, or emotional disturbances are not fitted. Patients with old corneal scars have been fitted but are followed very closely particularly in the early fitting period. To date, in several patients involved there has been no suspicion of impending breakdown of these areas.

One young lady who sustained a corneal abrasion on a trampoline was fitted with contact lenses six months later. She had enjoyed a rapid healing of her corneal abrasion at the time and, when fitted, her corneas were clear to biomicroscopic examination. Following the patient's attaining a four-hour wearing period, however, the area of original injury exhibited epithelial edema and punctate stippling. The lenses were discontinued, the stippling disappearing within 12 hours. In this patient's case, the stippling was symptomatic with tearing, mild conjunctival injection, and foreign body sensation present only in the involved eye. Six months later, a second trial was undertaken with the same results, lenses again being discontinued. Apparently metabolic changes persisted in the area of injury, perhaps analagous to those of recurrent erosion. It is interesting that rapid healing occurred without treatment, however, when the lenses were removed.

At least one patient has sustained superficial stromal scarring secondary to being struck in the eye while wearing the contact lenses. This injury healed in 72 hours, and the lenses were resumed within ten days. Detailed biomicroscopic examination has revealed no sequelae for approximately two years.

One other patient has had a lens broken in her eye during wear. The lens was shattered following being struck by a comb but only superficial linear abrasions occurred. Healing was complete within 24 hours, and no difficulty was experienced following her resumption of wearing the lenses several days later.

Young persons with mild ocular allergy are, if the conjunctiva appear clear and their desire strong, usually given an advance trial. They are warned that increased symptoms may occur on a seasonal basis and that their wearing time may require reduction at that time. The great majority of such patients have tolerated the lenses well without either conjunctival injection or increased symptoms.

An extremely interesting case involved that of a 16-year-old female fitted with contact lenses in 1959. She quickly adjusted to extended wear but eight months later developed chorioretinitis of the right eye. The right lens was discontinued and a uveitis survey performed. No etiological agent was determined. Cycloplegia, topical and systemic corticosteroid therapy was begun. Rapid control of the chorioretinitis was obtained and the systemic corticosteriods were discontinued two months later. Topical steriods were continued until approximately six months later. At this time the choroiditis was quiescent leaving only hyperpigmented scarring in the involved area of the choroid. The patient was instructed to resume wear of the contact lenses two weeks later but at this time punctuate erosion occurred centrally when the patient resumed a two-hour wearing period. The initial wearing period was then dropped to 15 minutes daily with a 15 minute increase each day. No further difficulty occurred, the patient having worn her lenses for approximately one year. It is assumed that the topical corticosteroids altered her corneal metabolism in such a way that a previously well-tolerated lens caused corneal erosion. Very small increases in wearing time have resulted, however, in re-establishment of the former wearing pattern.

SUMMARY

Experience gained in direct lens fitting has led to certain personal observations and opinions. The fact that on occasions certain patients have violated normal standards of hygiene and wear, for example, full time wear and mouth to eye insertion, has been a cause for some concern.

A second observation stems from the fact that a moderate number of patients have required contact lens modification not because of symptoms but because of slit lamp findings. Except in advance stages, these can be visualized only by the physician using the corneal biomicroscope. Personal supervision of contact lens fitting by the ophthalmologist is thus held essential. It is the responsibility primarily of the ophthalmologist and secondarily of the lay technician that such supervision be present.

Each patient must be carefully examined, if not during the fitting procedure, certainly at its completion. This examination should preferably be performed after the patient has worn his lenses six to eight hours that day. During each follow-up

visit the hazards of infection or deviation from normal standards of wear should be re-emphasized. ★★★

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THE PERTINENT QUESTION

Twinkle, twinkle, little star,
I don't wonder what you are;
I surmised your spot in space
When you left your missile base.
Any wondering I do
Centers on the price of you,
And I shudder when I think
What you're costing us per twink.

Treatment of Psychiatric Problems in General Hospitals

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Through the 1800's as the population of civilized countries grew rapidly, the state and federal government took over the operation of mental hospitals. This move was accompanied by the development of specialized hospitals other than psychiatric ones so that by the end of the 1800's there were hospitals for infectious diseases, hospitals for the tuberculous, and mental hospitals.

With the advent of the chemotherapeutic agents, however, this trend was reversed and more and more use was made of the general hospitals. In this paper the author discusses this trend as it applies to the care of patients with psychiatric problems.

In the last 15 years, there has been a definite shift toward the use of general hospitals rather than specialized psychiatric hospitals for the treatment of patients with psychiatric problems. This change seems to have come about largely since World War II and as a result of the development of a host of chemotherapeutic agents.

In 1949 physicians were given the first of an avalanche of medicines which have already changed the picture of the treatment of psychiatric conditions. By the middle of the 1950's, New York State with its huge state psychiatric hospital system found itself not only no longer in need of increasing its hospital beds but actually with a few empty beds showing up.[1] Since the beginning of the vast system of state hospitals, nothing like this had been seen before. Gradually, the situation in the nation's most populous state began to have its parallel in all of the other states.

Credit for this tremendous change should not be given entirely to the development of the new psychiatric drugs, although they played a major role. Other things were taking place at the same time. Patients in state hospitals were getting well with treatments already at hand, such as electroshock treatment, insulin coma treatment, penicillin for syphilis, and vastly improved rehabilitation measures developed during the War. State legislatures became aware that by spending more money they could eventually save money. Many states overhauled their hospital systems and set about to raise the per capita amount spent on psychiatric patients, sometimes manyfold. A recent development has been the launching of a really gigantic effort toward "crash research" in the field of psychiatric disorders. All these things have had their part in the shift toward the treatment of patients for psychiatric disorders in general hospitals.

From the Department of Psychiatry, University of Mississippi School of Medicine.

Read before the regular meeting of the North Mississippi Medical Society, Oxford, Mississippi, April 5, 1962.

DEPARTMENTAL UNITS

Until quite recently most of the provisions in general hospitals for the care of psychiatric patients took the form of "departmental units." The university medical centers probably set this pattern, and there are some things about the care of the psychiatric patient which require special facilities just as is the case with the obstetrical patient and the surgical patient. This fact stimulates the construction of separate specialty units. Many departmental psychiatric units are still being built into general hospitals in large cities. These are most useful where there are specialists in psychiatry to take care of the patients in them.

Today's psychiatric unit in a general hospital is well illustrated by the unit recently completed at the University Medical Center in Jackson.[2] This

unit is a highly specialized diagnostic and treatment department specifically designed for a wide variety of uses. With tempered glass, which is virtually unbreakable, and steel wire spring screens, which are quite inconspicuous, safety is insured at the window areas. Wards are usually unlocked. Bedrooms are designed with living room "motel-like" decor and furnishings. A dining room is provided so that patients can eat sitting up and at tables in company with each other. An occupational therapy suite is a necessity as well as "quiet" and "active" living room space. Enough office space is supplied for interviewing patients and carrying on psychotherapy. Group therapy can be conducted usually in the dining area or in one of the "living" areas. Continuous visual and spoken contact with the occupants of one or two rooms for the sicker patients can be maintained from the nurses' stations by the use of closed circuit television. This type of nursing observation is built into the UMC psychiatric unit.

The program in a unit like this can be extremely flexible. Such a unit can support the program of a service furnishing everything from diagnostic study and short-term periods of intensive treatment right on into a graded program for moving the patient as far as he is able to go toward full and complete rehabilitation. If the patient is acutely ill, he can be lodged in a bed in the unit for study and treatment. Later he might live outside so he can come in to the treatment facilities as a "day-patient." However, there are patients who have completed most or all of their hospital treatment and yet need to be in the city while they work themselves into outside life and occupation. It may be desirable in such instances for the patient to sleep in the hospital at night and be out most of the day. Such patients become "night-patients" in contrast to the "day-patient" status described above. Consequently, the departmental psychiatric unit has great flexibility.

It is significant that the Veterans Administration, involved as it is in an extensive hospital program and with a very high percentage of psychiatric patients, has announced that it will build no more specialized psychiatric hospitals.[3] Their program will henceforth be developed along the line of the psychiatric unit as part of the general hospital.

The staff for a psychiatric unit is not just comprised of psychiatrists. A team of specialists is required. This team is comprised of psychiatrist, psychologist, social worker, nurse, occupational therapist, and other special therapists such as educational therapists and recreational or nurse therapists. A full array of consultants in the medical specialties is also necessary. The staff-to-patient ratio on a surgical service may be as high as 1:1 if the necessary ancillary personnel of operating and recovery rooms are included. Correspondingly the staff in a psychiatric unit may be much higher, as high as 2:1 of personnel-to-patients.[5]

CARE OUTSIDE OF UNITS

Just as surgical and medical patients can be housed today in general hospitals on the same floor, so psychiatric patients (in many instances being cared for by their own physicians) can be housed in a general hospital on a private floor along with patients whose conditions are primarily surgical or medical.[4] This is especially true in smaller hospitals.

For one thing, the smaller hospitals today are built, more often than not, in horizontal one-story design. This eliminates one need for detention features which used to be regarded as so highly important in the multiple-storied hospital. In addition to this, the need for detention features has almost moved out of the picture. Another feature of the present hospital which fits in with the requirements of the psychiatric case is the trend away from large open wards toward smaller units of two and four beds with many single rooms. This type of design in a hospital is particularly suited for the psychiatric patient who may at first need to have an individual room and then later does well in a room with one or more other persons. These patients tolerate poorly the enormity of a huge open ward.

The psychiatric case, however, does require some facilities not needed by the medical or surgical case. The general hospital has heretofore been geared to the individual who will be sick in bed when he arrives at the hospital and who will be leaving the hospital almost as soon as he is able to get out of bed. Such a person requires facilities for the bed-ridden patient. He needs a bed that the nurse can get at easily and comfortably so that she can make it up with the patient in it, administer medication, and take care of the patient's toilet while he is living in his bed. There should be facilities for him to eat in bed and a minimum of extra-bedside furniture.

Almost the exact reverse is true for the psychiatric case. He may need to spend his first 24 hours in bed, but often he shouldn't spend the bulk of his day in bed even from the start. So provisions have to be made for a certain amount of living room space. This is not hard to do. If dayrooms are not practical, rooms can be made for

one, two, or four patients which provide for comfortable sitting up space and allow patients to eat out of bed, to sit up in a chair, and have a living room existence in the hospital just as they did at home.

In addition to this, there is the requirement of some sort of space within the hospital where the patient can occupy himself during the day and a variety of pursuits to which he can address himself. This is the purpose of the occupational therapy suites which have played such an important part in the treatment of almost all varieties of psychiatric patients. So much then for the physical plant and the few special facilities needed to equip it for the care of psychiatric problems.

TYPES OF CONDITIONS

Let us look at the types of patients who can be treated in a general hospital. The departmental unit with a psychiatrist and team of assisting professional persons can care for any type of psychiatric case. With a few additions in the way of a children's examining room and play therapy equipment, children can be studied and many of them treated. The children posing more severe management problems cannot well be cared for without special day space of their own. While long-time hospital cases can be treated in a general hospital unit, this use of the unit is only practical as long as the goal is clearly that of getting the patient back into the community as soon as possible.

A large variety of psychiatric syndromes, however, can be managed in general hospitals without special units. The most commonly encountered form of psychiatric symptomatology today is probably the depressive reaction. Electroconvulsive treatment with anesthesia and succinylcholine chloride is still the treatment of choice. However, it is no longer the only treatment for depression. Many depressed patients are treated and returned to their families and work without the use of electroshock but with supportive personal attention and one or other of the various antidepressant drugs.

In general these drugs should be given in substantial doses for the first few days and then cut back to a maintenance dose. Niamide, for instance, should be given in doses of 100 mg. each morning and night for the first three to four days and then the dose should be cut back to 25 mg. three times daily. The drug should be continued and taken regularly to keep a certain level up in the system for at least three weeks before concluding that one has witnessed what it will do. If it is to be discontinued at the end of a month because the patient fails to respond, then a period of a week should elapse before the next drug regime is commenced. Some patients tolerate poorly a long period during which one regime and then another is tried and these patients probably should receive electroshock. Agitated states can be controlled with the addition of tranquilizers. The accompanying insomnia should be treated by the use of a hypnotic and chloral hydrate is often extremely effective here.

Among the organic conditions which are treated in general hospitals the acute brain syndromes rank high. Excited behavior in delirium tremens was formerly so difficult to control that these patients had to be sent to the mental hospital. Today these patients are treated in the general hospital.

Sparine can be used intramuscularly giving it every hour until the patient is tranquilized. The patient's blood pressure must be taken about three-quarters of an hour after each dose of Sparine. If it does not fall below 100 and the patient is still agitated, or over-restless, the next dose should be administered. In three years I have not seen a case that required more than 350 mg. a day if Sparine was the agent used. The patient's nourishment must be kept up by drips if he is not eating and Dilantin should be given in order to prevent possible withdrawal seizures. The practicing physician is often in a much better position to subsequently steer these patients into a follow-up program of rehabilitation than is a psychiatrist.

In former years women who developed postpartum psychoses had to be removed from the general hospital and sent to a mental hospital. Many of these patients today are treated right in the general hospital with the phenothiazines and enough personal attention to understand and help them with the problems which appear to be preoccupying them. Their total hospital time is relatively brief and the patient and family are spared the distress of removal to a psychiatric hospital.

Patients suffering from a variety of the psychoneurotic disorders present in states of crisis often with histrionic displays of excitement or other startling manifestations. Although they must be removed from their home setting, they can be cared for quite well in a general hospital. The important combination of medical and psychiatric evaluation can probably be better done in the general hospital than in the specialized hospital.

PSYCHOTHERAPY

To some extent all physicians employ psychotherapy in their daily practice. It might be said that the use of a placebo, which depends for its effectiveness upon a psychological response, and

the hearing-out of a depressed patient are both forms of psychotherapy.

There are "deeper" forms of psychotherapy practiced by psychiatrists because they have had special training in these kinds of treatment and they have structured their practice in such a way that they can devote the bulk of their time to these more long-time and continued sorts of personal psychotherapy. One of the talents required of the practicing physician is to be able to recognize when he has reached the limits of psychotherapy which he is able to afford a patient and to seek for his patient the help of the psychiatrist.

SUMMARY

The recent trend toward the care of psychiatric problems in general hospitals has been traced. Special facilities required for caring for psychiatric problems in general hospitals have been listed, and the kinds of psychiatric problems which may be treated in general hospitals have been discussed. ★★★

2500 North State Street

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STORK SCARE

As the time approached for his second child to arrive, the father decided he had better break the news to his first born. "Son," said he, "I think you ought to know there's a stork flying over our house." "Gee," said the boy, "I hope it doesn't scare Mother." "She's pregnant, you know!"

Clinicopathological Conference XXXVII

Conducted by the Department of Pathology
University of Mississippi School of Medicine
Jackson, Mississippi

In CPC XXXVII, Dr. Blair Batson, chairman, Department of Pediatrics, University of Mississippi School of Medicine, discusses the case of a ten-month-old Negro boy admitted to the University Hospital with the chief complaint that he "couldn't get breath." About six or seven days before admission, the patient became ill with a "chest cold" and three days before admission he developed fever and was diagnosed as having pneumonia. At 2 a.m. of the day of admission he awoke with high fever and respiratory distress and was admitted shortly thereafter.

Other discussers are Drs. Robert D. Sloan and Joel G. Brunson.

Dr. Blair Batson: "This ten-month-old Negro boy was admitted to the University Hospital during December 1960 with the chief complaint that he 'couldn't get breath.' The informant was considered a reliable historian and stated that the patient was in apparently good health until six-seven days prior to admission when he became ill with a 'chest cold,' manifested by a nonproductive cough and coryza. He remained afebrile, alert and active, and continued to play.

"Three days prior to admission the infant developed fever. The following day he was seen by his personal physician who told the mother the patient's temperature was 105° and that he had pneumonia. He was treated with an injection of penicillin, red liquid, and a banana-flavored liquid medicine. I was asking a few minutes ago which antibiotic was banana flavored, and Dr. J. M. Montalvo reminded me that Ilosone, a brand of erythromycin, was so flavored. Therefore it is possible he received erythromycin.

"This is of some importance since apparently his symptomatology remained unchanged, whereas if this child had had pneumonococcal pneumonia, he most probably would have had some subsidence of fever. This would also probably be true in streptococcal pneumonia. With the usual type of pneumococcal pneumonia, the patients who respond have an almost miraculous reaction in terms of fever and, to a lesser extent, of clinical symptoms.

"At 2 a.m. of the day of admission he awoke with high fever and respiratory distress. I can't be quite sure from this statement as to whether the high fever had continued all along or whether it had come down a bit and then had gone back up. Since this is the first statement concerning respiratory distress, I will assume that at least its severity was a new sign. He was brought to the Emergency Room of the University Hospital and admitted there because a bed was not available. The patient had had no diarrhea, vomiting or seizures and had not been exposed to any acute infectious diseases. I think the latter is of importance since he did start out with an upper or lower respiratory infection without any serious symptoms as do many of the contagious diseases. There is always the possibility that such an infant is developing the interstitial pneumonitis of measles or chicken pox. Usually, however, this does not occur until the patient is well into his disease.

"It is not recorded in the chart if the onset of the respiratory difficulty was abrupt or associated with coughing, if the patient experienced cyanosis, had hoarseness or other changes in his ability to vocalize, if there was any change in his cough or a barking quality to it, or if there were any foreign bodies in the baby's bed which the could have aspirated. All of these questions are items that would come to mind in trying to decide whether this respiratory distress was sudden and whether it was primarily in the upper or lower respiratory tract. At this stage one has to think about dis-

orders which are associated with both the upper and lower respiratory tract since his mother had been told he had pneumonia.

"I would like to just mention two or three things which we have seen. I remember one child who had unequivocal marked inspiratory distress and who also had a clear cut lobar pneumonia on examination and by x-ray. He had a tracheostomy with almost complete subsidence of his serious symptoms. Thus he had at the same time severe laryngitis and severe pneumonia. We have also seen from time to time patients who had epiglottitis or laryngotracheitis and also lobular pneumonia, both apparently caused by *Hemophilus influenzae*. As a matter of fact, during the winter in which the first child was admitted to this hospital, there was a high incidence of pneumonia and bronchiolitis due to *H. influenzae* and a relatively low incidence of laryngitis. These things can go hand in hand and not infrequently do when careful studies are performed. If the child had had only penicillin and erythromycin, we would perhaps expect the *H. influenzae* not to be deterred in its course of multiplication.

EXAMINATIONS

"A system review was negative. The past history revealed a reasonably normal gestation and delivery at the University Hospital, and the neonatal course was uneventful. Apparently his general health had been excellent, and as far as we know there had been no previous illnesses. The feedings were about standard for his socioeconomic status. He apparently was given an adequate protein and caloric intake. He had had some solids from the table. He had received the usual immunizations except against poliomyelitis. He had not received vitamins. Since he had been given evaporated milk, he received adequate vitamin D. I suspect he had potlikker regularly which would satisfy his vitamin C requirement. Growth and development seemed within normal limits. The family history was remarkable only for the fact that one child appears every year.

"Physical examination revealed that this was a well-developed and well-nourished colored male who was acutely ill and in marked respiratory distress with quite rapid respirations, a rapid pulse, and temperature of 104° rectally. Obviously the child was rather ill. The anterior fontanelle was flat and not bulging. There was flaring of the alae nasi. There was a slight nasal congestion. The neck was said to be supple and the pharynx was slightly injected. Suprasternal and subcostal inspiratory retractions and minimal intercostal retractions were present.

"This is primarily a description of upper respiratory distress, and taken at face value this would mean that in truth the child was having inspiratory difficulty. On examination of the lungs one physician did state that there was an inspiratory stridor; the others either did not hear it or did not record it. There were bilateral rales and rhonchi most marked in the right upper lobe, but there was no dullness to percussion. The heart was within normal limits.

"It was noted on the initial examination that the abdomen was protuberant and distended. Now this doesn't cause too much alarm as a rule since a great many children who have lobar pneumonia will develop some paralytic ileus. Extremities, genitalia, and neurological examination all were said to be within normal limits.

"Hemoglobin was 6.9 gm. with a hematocrit of 24. The red cells had hypochromia 2 plus, poikilocytosis 2 plus, macrocytosis 1 plus, anisocytosis 1 plus. This description is interesting because the usual anemia at 10 months of age in this group is due to iron deficiency and one would expect to find many microcytes and more hypochromia at this level of hemoglobin. Therefore I would wonder whether this child had had either an aplastic crisis or a hemolytic crisis of some type. However, we know from past experience that it is a bit dangerous to depend on just a single description of red cells, and if one hasn't seen them himself, it is wise not to jump to a conclusion rapidly. Before leaving this point I would like to comment that the association of rather rapid onset of respiratory distress and anemia brought to mind the possibility of pulmonary hemosiderosis. It does occur in infants. They may have fever up to 103°F, and the lungs usually show a rather generalized mottled appearance on x-rays. As you will see shortly this child's chest film did not fit this description.

"Urinalysis showed pH 6.5, specific gravity insufficient amount, albumin-trace, glucose-trace, no cells, acetone moderate. The acetonuria probably is on the basis of poor caloric intake due to his illness. However, we do not have precise information on this point. Dr. Sloan will show the x-rays."

X-RAY DATA

Dr. Robert D. Sloan: "PA and lateral chest films were taken at the time of admission. The mediastinal structures appeared normal except for a slight shift of the upper mediastinum towards the right. As mentioned in the protocol, the left hilar

region and lung field appeared innocent. There was obvious pathologic change on the right which appeared to involve both the lung parenchymal and the pleura. Specifically, there appeared to be a combination of parenchymal consolidation and pleural reaction or fluid. There was a suggestion of blebs or cavitary component in one area, but it is difficult to be sure of this. Otherwise the chest appeared normal. There was a moderate amount of gaseous distention of the abdomen, suggesting that this probably accounted for the clinical distention, rather than a mass. The liver looked perfectly normal in size.

"In routine clinical reading the combination of consolidation and pleural reaction is most commonly due to a staphylococcal or pneumococcal infection. Being a CPC, however, it is hard to believe it is quite that simple. I suppose some other organism such as tuberculosis might be considered, but again if we were reading this routinely we would pick staphylococcal pneumonia first and pneumococcal second."

Physician: "Would you comment on the not-so-opaque area."

Dr. Sloan: "That could be the so-called bleb pattern that is seen in staphylococcal pneumonia. It should be mentioned that no foreign bodies are identified and that the tracheal air column appears normal. A lateral view of the neck was obtained, but the laryngeal region was not adequately shown for diagnostic comment."

DISCUSSER'S SUMMARY

Dr. Batson: "Thank you. The lateral view of the neck was done to see if the child had a retropharyngeal abscess. This is most common in children under two years of age and is most often of staphylococcal origin. The fact that such a view was obtained would indicate that the child was considered to have marked inspiratory stridor. The possibility of staphylococcal disease is always with us today, even in patients who have not been hospitalized or in contact with hospital personnel. However, this patient was born in a hospital.

"The course of staphylococcal pneumonia in our experience at University Hospital has been variable. In the earlier days most of the patients rapidly developed empyema; the products elaborated by the staphylococci progressively destroyed lung parenchyma resulting in rupture into the pleural spaces. On the other hand some patients only developed a severe pneumonia. In many patients two or more lobes were affected. Recently, however, we have seen cases in which the disease was less widespread. Certainly I would agree completely that when we see on x-ray an area which may be a bleb, the first thing we think about is staphylococcal pneumonia.

"I have already said why I do not think this case represents pneumococcal disease. The other etiologic agent that I have seen causing this picture was *Mycobacterium tuberculosis.* However, this group of patients were usually not quite so ill so rapidly. There is no valid reason, however, why this patient could not have had tuberculous pneumonia with caseation. On the other hand there are good clues which make me think tuberculosis is an unlikely possibility.

"The child was treated with penicillin, Benylin, Neo-Synephrine, oxygen mist, a clear liquid diet and antifebrile measures. He was admitted to the ward seven hours later when a bed became available. His temperature had dropped to normal, but his clinical course remained unchanged. On the second hospital day he apparently developed even more severe abdominal distention and was in severe respiratory distress. It would be nice to know a bit more precisely whether the increasing respiratory distress was thought to be due to the increasing abdominal distention or to be unrelated. The stomach was aspirated and a rectal tube was inserted; therefore, it is quite likely that the distention was marked. Chloramphenicol was started. A few hours later he had respiratory and cardiac arrest. Open cardiac massage was done to no avail.

"I would like to return to the problem of abdominal distention. I mentioned earlier that paralytic ileus occurs with lobar pneumonia. This is particularly true if there is diaphragmatic pleurisy. I am not certain that the latter observation is universal. Another possibility is that this child had a systemic infection, despite the fact that the blood culture revealed only diphtheroids, and that he had peritonitis as well.

"Another cause of distention is acute dilatation of the stomach. This may be quite serious due to the shock that often results. I have seen this happen on our own ward in a burn patient. Distention occurs with severe systemic infections although it is rare. This is rather difficult to prove at postmortem examination, however. I should mention that if this were a staphylococcal pneumonia with paralytic ileus, it is quite possible that he could have blown out a bleb. However, my experience

with blebs, limited as it may be, is that there is usually more warning. Blebs don't attain a tremendous size within a few hours, whereas empyema may occur within a very short time. Therefore, I doubt that a ruptured pneumatocele will be found.

"One last possibility remains. I have known of one infant who had classical lobar pneumonia. When he was fluoroscoped in the upright position, free air was seen under the diaphragm. The child obviously had a ruptured viscus which at operation turned out to be a perforated duodenal ulcer. I can't help but think that this may have occurred in this infant since Dr. Brunson has been so kind as to include some rather unusual complications in the last CPC's! This could conceivably account for the initial response of the pneumonia to treatment with the subsequent symptoms related to the ulcer perforating.

"To sum up, I think this infant has pneumonia. I think that most likely, on a statistical basis, the pneumonia is due to staphylococcus. There was not time for the throat culture to grow out before death. I would mention strongly the possibility of a ruptured viscus, although I am not going to put any money on it."

AUTOPSY REPORT

Dr. Joel G. Brunson: "In many ways this is what might be called a straight forward case of pneumonia, but there are other changes that suggest that something is drastically wrong with this child. I will mention these later. The left lung grossly displayed a confluent bronchopneumonia. The right lung was rather strikingly different and showed numerous cavities which contained pus, with some evidence of fibrosis around some of them. These were quite large and encompassed most all surfaces of the lung with the exception of the lower portion. Several of these had actually perforated the pleural surface and associated with that there was a fibrinopurulent exudate, or empyema. So the child had numerous pulmonary abscesses with broncho-pleural fistulae. I believe that his terminal episode probably was cardiac failure. The right side of the heart was dilated and slightly enlarged, and there was acute congestion of the liver, spleen, and the kidneys.

"Microscopically, the lung sections show the classic features of abscess formation. The pleural surfaces showed the fibrinous to fibrinopurulent exudate with complete obliteration of the pleura and direct continuation into the underlying lung parenchyma. In the areas of abscess formation the structures had been completely destroyed and replaced by dead cells and dead tissue and around these there was an intense confluent pneumonitic process. Many of the vessels were packed with white cells, and one could also observe many small vessels which were thrombosed. This may have played some role in inducing cardiac failure. At higher magnification, clumps of micro-organisms were observed in many of the abscesses in the lungs, and from these was cultured coagulase positive staphylococci.

"It appears to me that this is a rather fulminating process, despite the fact that it is a staphylococcus and probably a resistant staphylococcus, and that it is a bit rapid for a child to sicken and die like this in a week. I would like to suggest that this patient is probably an immunologic cripple. There are two lines of evidence which tend to support this suggestion. One is that in looking over the sections of lymph nodes and spleen and Peyer's patches, I have not yet been able definitely to identify any plasma cells. Second, in view of recent evidence pertaining to the thymus and the development of immunologic mechanisms, we went back and looked at this patient's thymus. If we compare it with a normal thymus from a child the same age, it would seem that this child's thymus had either failed to develop properly or else had undergone much more rapid involution than would be expected for this age.

"I feel that there is a strong probability that this patient had agammaglobulinemia, or that in some way his immunologic processes had been compromised. This may in part account for the rapid fulminating course of his disease. I think it would be of interest to have a detailed family history, and it would have been informative if we had thought at the time of autopsy to get some plasma for protein studies. I suspect that as time goes by we will uncover more and more of such patients as these that come in with fulminating infectious processes."

RARE DIAGNOSIS

Dr. Batson: "This is extremely fascinating especially since we have not made this diagnosis clinically during the last seven years, although it has been looked for frequently. I would take issue with the statement that children with staphylococcal pneumonia don't run a rapid course and die quickly. We have seen patients who appeared well and yet were dead within 48 hours with staphylococcal pneumonia. I certainly don't believe all of

them had agammaglobulinemia. Some of these were infants on the ward who were convalescing from some other disorder. A slight temperature rise would be noted one day, and the child would be dead the next night. At postmortem examination a complete consolidation of all lobes of the lungs would be found."

RAPID COURSE

Dr. Brunson: "Yes, but it still takes a little while under usual circumstances for the lung tissue to get softened and become liquified necrotic material."

Dr. Batson: "This is true. I don't know about the length of time necessary. However, I remember one child admitted one afternoon with symptoms of one day's duration. He seemed quite ill but on x-ray just a tiny patch of bronchopneumonia was seen at one base. Twenty hours later 300 cc. of pus was removed from the child's pleural cavity. I don't know how fast tissue destruction occurs, but there must be very rapid destruction and a massive inflammatory process to result in 300 cc. of pus in an infant within such a short time period. By the time he died he had been acutely ill according to the history for at least four-five days.

"In the days before we knew agammaglobulinemia existed, I took care of one child through staphylococcal osteomyelitis, pneumococcal empyema, *H. influenzae* empyema, and I don't know how many episodes of otitis media, mastoiditis, and other bacterial infections. She later proved to have agammaglobulinemia. She responded well to antibiotics without the benefit of gamma globulin."

Dr. Brunson: "Yes, these patients surely do respond well to antibiotics. I wonder if this child got the right medication for the organism that he had."

BRONCHO-PLEURAL FISTULAE

Dr. Batson: "It would be nice to have the organism sensitivities and particularly to know whether the child really received erythromycin. He certainly did not get it continously. Our usual procedure when we see a child who has an air-containing pocket in an area of pulmonary consolidation is to treat as if he has staphylococcal pneumonia.

"I would like to ask a question. You mention the fact that the child had broncho-pleural fistulae. I usually think of this as being a situation in which air is going back and forth. What is the pathologist's description of a broncho-pleural fistula in morphological and physiological terms?"

Dr. Brunson: "It is difficult to say anything about the physiology because the patient's pleural cavities had been entered at the time of cardiac massage, but we look upon a broncho-pleural fistula as the communication between a pleural cavity and bronchus. I presume that this could be functional. I see no reason why it shouldn't be from the standpoint of air."

Dr. Batson: "In evaluating our treatment it is extremely important to know whether this was a functioning fistula."

Dr. Brunson: "I don't know how long this had been present either. The inflammatory exudate on the pleural surface could have been an accompaniment just of the underlying pneumonia. This could have been one of the causes of his death, too, with sudden perforation of these areas."

Dr. Batson: "I would like to ask one other question concerning the dilatation of the heart and congestion in the liver. Do you think that either could have occurred very rapidly? This child did have open heart massage."

Dr. Brunson: "Yes, I am sure that all of the pumping and squeezing played a role in this business. But in areas of the lung not involved with pneumonia, there is what amounts to acute pulmonary edema without inflammatory cells. I would presume that he was on the borderline at least of cardiac failure. Such might have been inititated by multiple septic thrombi forming his pulmonary vessels or as a result of further compromise in his respiratory situation by rupture of some of these abscesses on the surface of the lung."

SUMMARY

Dr. Batson: "Was there anything of diagnostic significance in the abdomen at all?"

Dr. Brunson: "No, there was nothing that would explain the distention except gas in the intestinal tract. In summary, this is the case of a ten-month-old child who developed staphylococcal pneumonia with abscesses and formation of broncho-pleural fistulae. Pathologic study indicated that, in addition to this process, there was evidence of cardiac failure—possibly precipitated by numerous septic pulmonary vascular thrombi. The marked involution of the thymus and inability to detect presence of plasma cells in microscopic sections from the lymphatic organs suggest that this patient may have had agammaglobulinemia with resulting impairment in immunologic response." ★★★

2500 North State Street

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Meeting, June 16-20, 1963, Atlantic City, N. J. F. J. L. Blasingame, executive vice president, 535 N. Dearborn, Chicago 10, Ill.

American Academy of General Practice, April 1-4, 1963, Chicago, Ill. Mr. Mac F. Cahal, Executive Director, Volker Blvd., at Brookside, Kansas City 12, Mo.

Mid-South Postgraduate Medical Assembly, Feb. 12-15, 1963, Memphis, Tenn. Mr. Leslie Adams, Executive Secretary, 774 Adams St., Memphis 5, Tenn.

Southern Medical Association, Nov. 18-21, 1963, New Orleans, La. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham 5, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 13-16, 1963, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Amite-Wilkinson Counties Medical Society, First Tuesday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday Monthly, 6:30 p.m., Robert E. Lee Hotel, Jackson. George E. Gillespie, 514-A East Woodrow Wilson Drive, Jackson, Secretary.

Claiborne County Medical Society. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Second Wednesday March and November, 2:00 p.m., Clarksdale. Whitman B. Johnson, Jr., 645 Evelyn Ave., Clarksdale, Secretary.

Coast Counties Medical Society, First Wednesday March, June, September, and November. Charles N. Floyd, 1412-23rd Ave., Gulfport, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. Hugh S. Rayner, Jr., 1216-21st Ave., Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March and September. Robert B. Townes, Jr., 1196 Mound St., Grenada, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. Thomas W. Wesson, 421 Main St., Tupelo, Secretary.

North Mississippi Medical Society, First Thursday January, April, and October, Oxford. Marcus E. Morrison, 512 Van Buren Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Samuel O. Massey, Jr., 220 E. Canal St., Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. Thomas F. Puckett, 715 Arledge St., Hattiesburg, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Tom H. Mitchell, The Street Clinic, Vicksburg, Secretary.



The President Speaking

'Let's Stop the Conquered Killers'

C. P. CRENSHAW, M.D.
Collins, Mississippi

SMALLPOX IS A CONQUERED KILLER but it's no less a danger to the public health than it was before a vaccine was discovered, *if* the use of vaccine is ignored. At the recent Los Angeles clinical session of the American Medical Association, the House of Delegates showed a concern in this respect, calling on "physicians and their patients, particularly those who may be in contact with carriers, to maintain the needed protection against smallpox." An important campaign to secure public and professional awareness of this danger has been initiated.

Last year, New York and its eight million inhabitants got a shaking up when the celebrated case of the smallpox victim's arriving at Idlewild International Airport hit the headlines. It focused attention on an unhappy byproduct of the jet age which enables a traveler to go anywhere in the world in 15 hours, carrying almost any disease with him. The epidemic intelligence reports of the U. S. Public Health Service have repeatedly warned public and physicians of outbreaks of smallpox in western nations. Prevalence of the disease in the east is a continuing danger.

Most physicians need no urging to advise this vital immunization but not every doctor thinks to ask every patient about it. AMA's timely campaign will be directed along two lines: it will encourage physicians to vaccinate or revaccinate their patients against smallpox and it will urge the public to go to their physicians to secure this vaccination. Although the nation's declining immunization level has reached a dangerous low in this connection, responsible authorities see no need for panic programs of mass vaccination.

A conscientious effort by physicians in encouraging vaccination can virtually eliminate this threat to health in the United States. And let's not forget that our immunization laws in many states need a good going over if we are going to make the conquered killers shadows of the past. ★★★

JOURNAL OF THE
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EDITORIALS

Mēnē, Mēnē, Tēkel

I

THE PLENTITUDE OF WELFARE SERVICES under Social Security, including some now available and most of those proposed, has been weighed in the balances and found wanting—mostly for more money with which to pick up the taxpayers' tab. And if we Americans have a valid case against government paternalism and the insane goals of an administration apparently dedicated to socializing the nation's economy, then how much more valid it is in the light of what's happening in the community of free nations.

Italy has just experienced another increase in Social Security taxes and so has the United States. Ours went to 7.25 per cent of the first $4,800 of income for those employed and the present law provides automatic and scheduled increases up to 9.25 per cent by 1968. But Italy went us one better by raising its Social Security tax 3.75 per cent, making the total *almost exactly 50 per cent of payroll, applied to all earnings with no cut-off or ceiling*. So in the booming economy of this common market country, the government takes 50 cents for every dollar paid in wages.

All of which is to say that Giuseppe's socialized medicine, various security guarantees attached to jobs, public housing, and other social subsidies add up to a lot of lire.

II

In Italy, the employer is the goat. This logically follows for it's reasonable to assume that the bulk of the labor force is usually delighted to vote itself a raise at the boss' expense. More than likely, this will provide only short term prosperity because labor groups seldom take the long view in this day of the big handout.

Of the 50 per cent Social Security tax on Italian wages, the employer pays about 42 and the worker, 8, adding up to high priced welfarism. On a representative monthly salary of 100,000 lire—about $160—the tax breakdown is something like this for the five Social Security funds: for two funds providing unemployment payments, old age pensions, and assistance to orphans, the employer shells out 24.45 per cent and the employee, 7; for two additional funds for socialized medical services and public housing, 6.7 per cent comes from the business and a measly 0.72 from the worker; and the employer alone kicks in for the fifth fund, large family bonus pay differentials, a tidy fixed amount of 11,400 lire which is 11.4 per cent of the representative salary.

So the boss is taxed to the tune of 42.55 per cent and the employee, 7.72 per cent, for a total of 50.27 per cent of the wage. It's no wonder that Italian businessmen and the few conservative politicians are getting the jitters over the social tax-wage spiral and the threat it poses to the inflow of foreign capital. Even Italy's five common market partners are its economic enemies.

III

And are all these social welfare nightmares a matter of concern to medicine? The obviously affirmative answer is found in the definition of the several welfare areas which, save for housing, pensions based solely on chronological age, and

some employment-related payments, are medically-related to the extent of award determination and amount paid.

Compulsory federal medical care for the aged under Social Security would be the turning point toward total socialization and welfarism in the United States. From there on in, the program could and would accelerate as people, their gainful endeavors, and the economy become hopelessly entangled in a morass of bureaucracy, irreversible tax situations, and more and bigger government at the federal level. And how senseless and unnecessary it is to join the funeral cortege of private enterprise in this age of unprecedented productivity and prosperity.

Many Americans see the ominous handwriting on the wall. While there are Daniels enough to translate it, the liberal Belshazzars continue their impious feast upon those institutions—not the least of which is private medical care—which account in large part for the nation's greatness. But as before, their days are numbered because their weight in the balances finds them wanting.—R.B.K.

The Cultists' Kissin' Cousins

Hucksterism and cultism are at least kissin' cousins. No better proof of this assertion can be found than that demonstrated by the chiropractors who cynically advance their purposes at the expense of one of their own. Just recently, chiropractor R. K. Harris of Vicksburg was convicted of practicing medicine without a license and got himself a six months jail sentence and a $2,000 fine.

Court was hardly adjourned when the chiropractors issued a public broadside opining that the incident pointed up "the extreme necessity for a chiropractic regulatory act. . . ." This is the same old record still spinning on and on. It's been played for the legislature and public for many years but to date, nobody has been especially impressed.

Every chiropractic licensure proposal put before the legislature has been labeled as an act to "regulate chiropractic" and it's about as descriptive as a honey label on a bottle of vinegar. What the chiropractors want is the statutory badge of legality and stamp of sanction for their cult by the state. But licensure could not and would not change the hard fact that chiropractic is a false and discredited dogma against which the evidence is overwhelming. The people and the legislature have consistently refused to be fooled and flimflammed by such drivel as "regulatory measures" which, in fact, would really be legalization of the cult.

The *status quo* of no such law and no licensure for chiropractors is the best of all possible situations. Maybe chiropractor Harris wouldn't agree because there might be a difference between prosecution in a court of law and a call before a board composed of chiropractors. So the hucksterism will continue as long as cultism exists because resort to fact and logic might result in embarrassing silence.—R.B.K.

The Hard Sell Health Hazard

The medicine show on the 23 inch screen in America's living room is not merely in poor taste—it's downright dangerous. All of which documents the sad fact that some manufacturers of proprietary medicinals display an alarming lack of responsibility if not integrity. The hard sell on health can and does have disastrous consequences upon the uninformed.

The electronic media are not blameless, either. Already under fire for some advertising practices and program content, the television and radio moguls will do well to recognize that their days as



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free agents may be numbered. An indignant public could persuade the Congress to do something about cleaning the violence, grime, crime, and health hazards off the airwaves.

Take the "tired blood" pitch as a prime case in question. Countless hundreds of thousands are being deluded into purchasing and using nonprescription compounds containing shotgun mixtures of vitamins, iron, and minerals which are blatantly promoted for the self-treatment of all sorts of anemias. The American Medical Association has labeled this sales pitch as outright quackery.

Any physician can readily identify two specific dangers in such self-treatment: Since anemia is not a disease but a symptom, such dosings may mask the real trouble and, second, delay the victim's seeking medical care. Take the case of a 56-year-old salesman as reported by AMA. He felt rundown so he took a shotgun preparation for eight months. Severe pain finally convinced him to see a physician. Laparotomy disclosed cancer of the small intestine—inoperable. Early diagnosis might have made for a happier outcome but the patient died.

Says Dr. William G. Mullin of New York: "The person who turns to shotgun antianemic preparations is very much like the car owner who buys a carburetor and four new tires to repair the engine that is not functioning." The Food and Drug Administration has strong feelings on the subject, too, as stated by a spokesman, Wallace F. Jassen, who points out that laymen "are in no position to diagnose the presence of anemia, much less determine whether it is an iron deficiency anemia, pernicious anemia, or folic acid deficiency."

This isn't something that can be dismissed casually; it is serious, urgently demanding of positive action. And it's further a challenge to the integrity of the American industrial community to purge itself of irresponsibility.—R.B.K.

LETTERS

Friends Overseas

SIRS: At Christmastime I try to catch up with correspondence, particularly to those people who have been kind to me throughout the whole year. Fortunately for me, I have been receiving the MISSISSIPPI MEDICAL JOURNAL and have been enjoying it thoroughly, particularly the editorials. I like the professional articles too and most all of us in the office here enjoy the cartoons.

The JOURNAL has been coming regularly and I do want to personally thank you for your thoughtfulness and your consideration. Colonel Peatfield is with me here as my Deputy so he shares this good feeling as well.

FLOYD L. WERGELAND
MAJOR GENERAL, MC
SURGEON, U. S. ARMY, EUROPE

Fluoridation

SIRS: In the January 1963 issue of the JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION (J.M.S.M.A. 4:32), there were listed towns with controlled fluoridation programs and towns with 0.7 p.p.m. fluoride or more in their public water supplies.

To set the record straight, the article contained not only insufficient but inaccurate information. This was probably due to it being based on outdate information and inaccurate fluoride determinations of public water supplies.

The Mississippi State Board of Health recently completed fluoride analyses of all public water supplies in Mississippi. This information was sent to all practicing physicians in the state last spring.

There are now 17 towns that have initiated controlled fluoridation:

Calhoun City	Flora	Meridian
Carthage	Forest	New Albany
Columbia	Kosciusko	Newton
Columbus	Lexington	Philadelphia
Como	Louisville	Quitman
Corinth	Marks	

Towns where water supply contains 0.7 p.p.m. fluoride or more are:

Amory	Hollandale	Scooba
Arcola	Houston	Shuqualak
Georgetown	Leland	Sturgis
Greenville	Mayersville	Electric Mills
Hazlehurst	Mound Bayou	

If any physicians have not received or have misplaced the list of Mississippi towns and the fluoride content of their water supplies, we will gladly forward one upon request.

AARON TRUBMAN, D.D.S., M.P.H.
SUPERVISOR, PUBLIC HEALTH DENTISTRY
MISSISSIPPI STATE BOARD OF HEALTH

DEATHS

PENDER, CHARLES ANDERSON, Kosciusko. M.D., Memphis Hospital Medical College, Tenn., 1908; received a Fifty Year Certificate from the University of Tennessee College of Medicine for 50 years of medical service; emeritus member of MSMA and member of the Fifty Year Club; died Dec. 28, 1962, aged 81.

RADER, BENJAMIN BIGSTAFF, Clarksdale. M.D., University of Louisville School of Medicine, Ky., 1931; member of the American Society of Abdominal Surgeons, World Medical Surgeons, and Military Surgeons of the United States; died Dec. 23, 1962, aged 61.

TATE, JOHN EDGAR, Ripley. M.D., Tulane University School of Medicine, New Orleans, La., 1931; interned Shreveport Charity Hospital, La., one year; member, American Academy of General Practice and Southern Medical Association; died Dec. 16, 1962, aged 54.

WATKINS, HORACE CLEMENTS, SR., Quitman. M.D., University of Nashville Medical Department, Tenn., 1907; received a Fifty Year Certificate from the University of Tennessee College of Medicine for 50 years of medical service; emeritus member of MSMA; died June 28, 1962, aged 86.

NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

AUSTIN, WILLIAM DARRELL, Greenville. Born Eau Claire, Wis., May 3, 1930; M.D., University of Tennessee College of Medicine, Memphis, 1955; interned Roanoke Memorial Hospital, Va., one year; elected Oct. 10, 1962, by Delta Medical Society.

GABBERT, ELMO PIERCE, Bruce. Born Bruce, Miss., Sept. 5, 1934; M.D., University of Mississippi School of Medicine, Jackson, 1961; interned John Sealy Hospital, Galveston, Texas, one year; elected Dec. 11, 1962, by Northeast Mississippi Medical Society.

MSMA Membership Reported for 1962

MSMA membership in 1962 showed a drop from the 1961 total of 1,351 to 1,346 but maintained a substantial increase over the 1960 total of 1,317. These figures were released in a recent report from the Membership Department at association headquarters.

The membership drop occurred in the emeritus category which fell from the 1961 total of 110 to 100. In regular members there was an increase from 1,166 to 1,173 and in exempt members from 64 to 73. The exempt category includes physicians suffering from illness or hardship, those engaged in military service or a residency, and members in the scientific classification. There were 9 associate members included in this total.

As of Dec. 31, 1962 there were 1,789 white physicians located in Mississippi, an increase over the 1961 total of 1,723. At the end of 1962, there were 59 colored physicians in the state, a decrease from the 1961 total of 64.

Central Society remained the largest local group with 348, an increase from the 1961 total of 342. Nine component societies reached 100 per cent of their renewable membership from 1961. These were Amite-Wilkinson, Claiborne, Delta, DeSoto, Homochitto Valley, North Pearl River, Tri-County, and West.

W. B. Saunders Announces Recent Publications

W. B. Saunders company features the following recent books in their full page advertisement appearing elsewhere in this issue:

1963 CURRENT THERAPY
Today's best treatments—ranging from management of conditions causing enuresis to treatment of coma with analeptic drugs.

BOCKUS—GASTROENTEROLOGY
An eminent 3-volume work! Volume I, on the Esophagus and Stomach, just published.

MEARES—MANAGEMENT OF THE ANXIOUS PATIENT
Tells you from what sources anxiety in a patient may spring and how it can be resolved.

Book Reviews

Differentiation Between Normal and Abnormal in Electrocardiography. By Ernst Simonson, M.D., Professor of Physiological Hygiene, University of Minnesota, Minneapolis, Minn. 328 pages. St. Louis: C. V. Mosby Company, 1961. $13.50.

This book purports to be a treatise on the definition of abnormal and normal in electrocardiography without the usual divisions such as infarctions, arrhythmias, and conduction defects. I believe that this purpose is carried out exceedingly well, although at the sacrifice of producing an extremely difficult book to read and one which is truly a reference book.

The efforts to find critical points of normal and abnormal measurement are illustrated in all of their difficulties and frustrations, these difficulties changing as more critical analysis is applied to electrocardiographic measurements. For many years Dr. Simonson and his group have labored to put electrocardiographic variables into quantitative terms and to discover their inter-relationship to each other and, more important, their relationship to the patient. This is not to suggest that electrocardiography is simply a system or series of measurements but this is an inescapable fact and a discipline based on electrical fields, mathematics, and physical laws. This book has determined the deviation from normal thoroughly and the data presented in the book, in my opinion, serves as the best basis currently available for arriving at answers. Certainly, normal now means what is usual or common among persons who are presently classified as clinically healthy, but we are on the verge of extending this definition to record predisposition to disease, developmental trends, and other rather prophetic analysis.

Certainly as far as electrocardiogram is concerned, there is very little basis of knowledge if one tries to extend quantitative measurements to future predictions. Clinically healthy persons whose electrocardiograms are normal undoubtedly include many persons who vary in their future risk of coronary and myocardial insufficiency; within this range of "normal" records are included great variations. The question of the relative probability of future trouble associated with these variations is touched upon in this treatise and the need for follow-up studies on a large scale is mentioned. It would be too optimistic to hope that the electrocardiogram will ever be closely predictive of the future, but one can expect the useful evaluations of relative risk eventually from follow-up of population samples. This book lays an essential foundation in the treatment of probabilities as to present status. Dr. Simonson and his colleagues have done the best job of applying electrocardiography to clinical diagnosis on a firm statistical basis unless completely new lead systems are devised and exposed to the decades of experience of the standard leads and precordial leads with which we are familiar. It is quite probable that another book on this subject will be many years in the coming as this book probably represents the ultimate in the definition of the normal electrocardiogram achieved from the present methods of lead fields.

I recommend this book heartily for the interested electrocardiographer and clinical cardiologist as it will be a welcome source of data in any troublesome individual case.

JOSEPH P. MELVIN, JR., M.D.

The Stages of Human Development Before Birth: An Introduction to Human Embryology. By E. Blechschmidt, M.D., Professor of Anatomy, Director of the Institute of Anatomy, University of Gottingen. Cloth, 684 pages with 579 illustrations. Philadelphia: W. B. Saunders Company, 1961. $23.00.

"Up to the present time, human development has been compiled as developmental history on the basis of diverse observations of human specimens together with findings borrowed from zoology, comparative anatomy, and genetics. Today, investigations of human development have progressed so far that to persist in presenting their results from a phylogenetic point of view would overstep the limitations of an atlas. Therefore, instead of presenting a developmental history, the attempt will be made to represent the human development in an almost closed series of stages."

The above quotation from the preface characterizes the style of this work, which is essentially a very elaborate and thorough atlas. The text is brief and clear as is usual in books of atlas format. Emphasis is given to the developmental stages of the first two months when the structural principle of the adult is already evident. The entire textual material is in two languages—English and German. To the knowledge of the reviewer,

there is no book elsewhere available presenting human embryology in such an almost complete "step by step fashion."

All plates are accompanied by an extensive legend. Unique is a sequence of new illustrations based on reconstructions from a graded series of specimens. In many instances, drawings and sketches are added in order to complement the excellent photographies (black and white).

Special mention should be made of tables of an outline of the history of embryology and of special embryologic terms. There is an up-to-date international reference list and a comprehensive index.

This volume is obviously the work of an outstanding teacher and researcher and the product of many years of teamwork in collecting and technical preparation of human material. It should be a valuable aid to physicians, basic science teachers, and those whose work involves embryology (although there is no mention or concern with experimental advances or teratology). Although titled an introduction, the book demands some prior biologic knowledge. It is a splendid guide for the more advanced student.

KARL A. BOLTEN, M.D.

Domestic Journals

Children Who Starve Themselves and Anaraxia Nervosa. J. R. Blistzer; Roland Blockwell, and A. Blockwell: Psychosom. Med. 23:369 (Sept.-Oct.) 1961.

The authors in extensive studies done on children with feeding disturbances found that it was rare to get a history of feeding disturbance early in life from the parents. Their not eating seemed to be due to a fear of eating and was predicated on the possibility that food was poisonous or infectious, that disease might follow ingestion, or that it had a cannibalistic significance for the child. It was also found that in a high proportion of cases there had been a very marked conflict between the mother and the maternal grandmother which was evident to the child and where the bone of contention often was food.

It was also found that these patients with anaraxia nervosa and related types of feeding disturbances were much more deeply depressed than is usually seen in juvenile psychiatric cases. However, as in most depressions in childhood, this was not classically clinical and was more frequently organic, that is, failure to menstruate and pain. It was also found that all of these children had severe ambivalence toward both parents.

MARGARET B. BATSON, M.D.

State Morbidity Reported Through Jan. 4

The Mississippi State Board of Health reports the following occurrence of morbidity for 1962 through the first week of the year, ending Jan. 4, 1963. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	17
Tuberculosis, O.F.	1
Septicemia, Staph.	1
Mononucleosis, infectious	82
Hepatitis, infectious	11
Helminthic infections	
Hookworm	6
Streptococcus infections	
Scarlet fever	8
Strep throat	119
Pertussis	3
Measles	5
Chickenpox	13
Mumps	25
Influenza	4
Gonorrhea	72
Syphilis	
Late	1

Dr. Ricks Receives Three Major Honors

Dr. H. C. Ricks, Sr., of Jackson who retired Dec. 6 as director, Division of Public Health Laboratories, Mississippi State Board of Health, has received three major honors in recent weeks.

First, he was elevated to the post of professor of preventive medicine, emeritus, at the University of Mississippi School of Medicine. Dr. Ricks had been a clinical associate professor and received the emeritus appointment in recognition of his service to the school during his career as a public health officer.

In a Jan. 12, 1963, action, the MSMA Board of Trustees approved Dr. Ricks's application for emeritus membership. The action was recommended by the Central Medical Society on Jan. 8, 1963.

Finally, the Mississippi Department of the American Legion picked Dr. Ricks to receive its Distinguished Service Award for 1962. The award will be presented at the Legion's annual State Convention in Jackson July 12.

AMA President-elect Challenges Proponents Of Compulsory Medical Care To-Tell the Truth

Speaking before several hundred Jackson civic leaders, Dr. Edward Annis, AMA president-elect, challenged the proponents of compulsory medical care to "tell the truth."

In a Jan. 9 talk to members and guests of the Downtown Kiwanis Club, Dr. Annis listed a number of truths he said the proponents of federal medical care to the aged under Social Security fail to mention.



Dr. Edward Annis, AMA president-elect, second from right, addressed Jackson civic leaders on Jan. 9. Dr. Annis spoke on compulsory medical care. From the left are Dr. C. P. Crenshaw, MSMA president; Dr. Raymond Martin, who introduced Dr. Annis; Dr. Annis, and George Sugg, president of the Downtown Kiwanis Club which sponsored the meeting.

First, said Dr. Annis, those who see a great potential in votes among the 17½ million citizens over 65, are fond of saying that half of these senior citizens have an income of less than $1,000 a year. What they don't say, continued Dr. Annis, is that half of the folks under 65 also have an income of less than $1,000 a year.

Dr. Annis, father of eight children, added, "I can personally testify that 90 per cent of the Annis family has no income at all."

They say, continued Dr. Annis, that doctors cost so much more these days, but what they don't point out is that it costs the doctor more to operate. I spend as much today to operate my office one month as I spent to run it an entire year in the years between 1937 and the early 1940's, he said.

They say, observed the Miami surgeon, that hospital bills are too high. What they don't say is that labor costs account for about 65-75 per cent of hospital costs. And what labor leader would plead that these people be paid less, he asked.

Dr. Annis attacked Senator Estes Kefauver of Tennessee for his "villification of the entire pharmaceutical industry" over the cost of drugs. Said Dr. Annis: The "coonskin capped demagogue" charged that pharmaceutical houses are making thousands of per cent of profit considering the cost of the raw materials and cost of the drugs. What is not mentioned, said Dr. Annis, is that by the time the cost of research and special equipment is met, the profit margin looks more like 7 per cent.

Turning to the administration proposal for compulsory medical care, often dubbed "Medicare," Dr. Annis said that if you sold a health or food product as mislabeled as "Medicare," you would be thrown in jail. The proposed "Medicare" program, he said, would not provide for medical care, i.e. doctor and drug costs, but for hospital and nursing home services.

Dr. Annis, best known for his TV rebuttal to President Kennedy's Madison Square Garden television campaign for the medical care program, said he interviewed a number of senior citizens present to hear Kennedy. They all thought the program would pay their doctor bills, he said.

"I wonder how many will buy it when they understand the program," he said.

During Teddy Kennedy's campaign, continued Dr. Annis, the then-aspiring senator promised the people over 65 a fully paid-up insurance program for the low cost of $12.00 a year. What he didn't point out, said Annis, was that this figure was the cost for those whose income doesn't exceed $2,400. For those in higher brackets, the cost would be much more, he said. The yearly toll for those with annual incomes of $5,200 would be more like $55, he noted.

Why don't they tell the working men and women that the cost is coming out of their wages but will go for medical care for people over 65 who could afford it themselves, asked Dr. Annis. Although nothing will be paid into the program from the income from stocks and bonds, both rich and poor will be cared for, Dr. Annis said.

The AMA leader pointed out that the Social Security program was already unfunded by $320 billion. It took 26 years of Social Security Administration to collect the first $100 billion, he said. Under present legislation it will take only the next six years to collect the second $100 billion, he observed.

Dr. Annis noted that doctors were not unmindful of the needs of the elderly. Anyone who needs medical assistance can always get it regardless of his financial condition, he said. He observed that it is the just responsibility of the government to take care of the needy. But, he said, we must encourage the others to take care of themselves. We do not need socialization of a broad, needless insurance program, he concluded.

Dr. Annis spent both Jan. 8 and 9 in Jackson. In addition to his civic club address, he spoke to the faculty and students of the University of Mississippi School of Medicine and the Central Medical Society.

The Miami surgeon was the second man in the 116-year history of AMA to be named president-elect without previously having held office in the association. Prior to his election, he was chairman of the AMA National Speakers Bureau. He has won national prominence as a speaker on such TV programs as "Meet the Press" and "Your Doctor Reports" and as the representative of the medical profession in a TV debate with President Walter Reuther of the CIO and Senator Hubert Humphrey on health care for the aged.

South Medical Society Honors Dr. Culpepper

The South Mississippi Medical Society honored Dr. J. P. Culpepper, Jr., with a dinner on Dec. 13, 1962.

Dr. Culpepper is the first member of the 106-year old Mississippi State Medical Association to hold a national office in the American Medical Association. Dr. Culpepper is currently serving as vice president and member, Board of Trustees, of the AMA.

The speaker for the occasion was Dr. Edward R. Annis of Miami, president-elect of the American Medical Association. Dr. Annis became nationally known last year through his televised answer to President Kennedy's TV campaign for medical care for the aged under social security.

In responding to the tributes paid to him, Dr. Culpepper said "I have been a doctor a long time and am proud of it. Medicine has been good to me. It has honored me much more than I deserved."



The South Mississippi Medical Society honored Dr. J. P. Culpepper, Jr., vice president and board member of the AMA, with a dinner on Dec. 13. Shown are Dr. and Mrs. Culpepper (seated) and Dr. Edward R. Annis, AMA president-elect (at the mike). Dr. Annis was the featured speaker for the event.

"My one motive in taking an active part in organized medicine has been to gain some recognition for Mississippi medicine. My one main purpose has been to try to counteract the inroads of socialism. I want our sons to have a climate of free enterprise in which to practice their profession rather than to be dictated to by the government."

Approximately 200 members of South Mississippi Society, their wives, and guests attended the dinner. Dr. C. P. Crenshaw of Collins, MSMA president, introduced Dr. Annis, and Dr. Ed Moak of Richton, president of the society, was master of ceremonies.

Dr. McIntosh To Head DeSoto County Society

Dr. Barry McIntosh of Hernando has been named president of the DeSoto County Medical Association.

Serving with Dr. McIntosh will be Dr. B. B. Hoover of Olive Branch, vice president, and Dr. L. L. Minor of Walls, secretary.

Pearl River Society Is 100% In AMA-ERF Contribution

Along with their annual dues to MSMA and AMA, all members of the Pearl River County Medical Society voluntarily sent in a $5.00 contribution to the AMA Education and Research Foundation.

Total contribution of the group to AMA-ERF was $55.00.

Officers of Pearl River Society are Dr. Don C. Rudeen of Picayune, president, and Dr. Joseph C. Griffing of Picayune, secretary.

Other members of the Society are Drs. Donald Ray Berry, James Marcus Howell, Seiberth Sorley Kety, Dennis Elton Magee, Samuel Oliver Massey, William Wilfred Oser, Jr., George Brunus Stewart, all of Picayune, and Joe Harold Powell and Willie Franklin Stringer of Poplarville. Dr. James Ira Woodward of Picayune is an emeritus member of Pearl River Society.



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BOSERMAN

"When Dr. White studies a case, believe me, he leaves no stone unturned."

Medical Assistance Act Introduced in Special Session

During the special session of the Mississippi Legislature ending Dec. 21, legislation was introduced to implement the medical assistance to the aged portion of the Kerr-Mills Law.

Sponsor of the Medical Assistance Act, SB 1558, was Senator Walter Moore of Oakland, chairman of the Senate Public Health Committee. Governor Ross Barnett approved introduction of the bill before the special session.

Although the proposed legislation, introduced during the closing meetings of the session, did not come up for consideration, it is expected to be reintroduced during the Legislature's February special session.

Passage of SB 1558 would make Mississippi the 32nd state to implement medical assistance to the aged under Kerr-Mills.

Scientific Program Slated for UMC Day

Graduates and former house staffers of the University of Mississippi School of Medicine will combine homecoming with a scientific program at the fourth annual UMC Day on Feb. 7.

Planned by the Postgraduate Education Committee as part of the University's opportunities for physicians' lifelong learning, UMC Day will feature a series of walk and grand rounds and wind up with a dinner on the Heidelberg Roof.

Dr. Frank B. Rogers, director of the National Library of Medicine, will be the speaker at the 7:00 p.m. dinner to be attended by seminar participants, their wives, and other guests.

Beginning with an informal coffee at 9:00 a.m. during the registration, the session will get under way with pediatric walk rounds at 10:00 a.m. Medicine, Surgery, and Obstetrics-Gynecology will follow with grand rounds, according to Dr. Watts Webb, chairman of the postgraduate education committee. A psychiatry demonstration is set for 3:15 p.m. and a clinicopathologic conference for 4:00 p.m.

Dr. Robert Q. Marston, dean and director of the University Medical Center, will preside at the dinner and Chancellor J. D. Williams will welcome the guests.

The seminar is supported in part by a grant from Merck, Sharp and Dohme. Attendance will earn MAGP members five hours of category 1 credit.

Dr. Hill To Be Inaugurated President of Mid-South

Dr. Stanley A. Hill of Corinth, past president of MSMA, will be inaugurated president of the Mid-South Postgraduate Medical Assembly at the organization's 74th Annual Meeting.

Scheduled for Feb. 12-15, the meeting will be held at the Hotel Peabody in Memphis. Dr. Hill will succeed Dr. Gilbert J. Levy of Memphis.



Dr. Hill

A graduate of the University of Tennessee College of Medicine, Dr. Hill has practiced in Corinth for 30 years. He is past president of the Alcorn County Medical Club and the Northeast Mississippi Medical Society. He was speaker of MSMA's House of Delegates for ten years. He is presently serving on the editorial board of the Southern Medical Association.

The Mid-South Postgraduate Medical Assembly, which succeeded the Tri-State Medical Association, was organized in 1883. The change in name came in 1931 when it became apparent the Assembly was drawing physicians from more than the original three states. The Assembly convenes annually in Memphis during February. Its purpose is to provide the highest type of postgraduate instruction possible in a four day program.

Nineteen speakers are scheduled for the scientific sessions of the Assembly. Dr. Edward R. Annis of Miami, president-elect of the American Medical Association, will be the speaker for the annual banquet.

State-wide Check of X-ray Equipment Completed

Dr. A. L. Gray, state health officer, has announced that the State Board of Health has completed a radiation safety survey of all known medical and dental diagnostic x-ray equipment in the state.

The primary purpose of the survey was to insure that all equipment was up to par in so far as radiation safety is concerned.

This program was conducted by the health department's radiological health unit, which is also responsible for the licensing and regulation of sources of ionizing radiation and for the determination of potential environmental hazards such as fallout and effluent from nuclear facilities. Since the evaluation of x-ray equipment is only a part of the responsibility assigned to the radiological health unit, a total of 21 months was required to complete this initial phase of the x-ray safety program.

A total of 2,280 machines were checked during this time. Over 1,600 of these were medical x-ray units and the remainder were dental.

Mississippi was the first state to complete the initial phase of this program, which calls for the periodic examination of x-ray equipment. All states, however, are moving in this direction.

Some months ago, Dr. Gray appointed a radiation advisory committee. The members are Dr. Elmer J. Harris, a certified radiologist on the staff of the Mississippi Baptist Hospital and clinical instructor of radiology at the University of Mississippi School of Medicine; Dr. Robert D. Sloan, certified radiologist, professor and chairman, Department of Radiology, University of Mississippi School of Medicine, and Dr. Arthur T. Tuma, radiologist and certified radiation physicist, assistant chief radiologist, U. S. Veterans Administration Center, all of Jackson.

Governor Barnett Names Drug Study Committee

Governor Ross Barnett has announced appointment of a six-member committee to study habit forming drug usage and manufacture in Mississippi.

The committee, headed by Dr. A. L. Gray, executive officer of the Mississippi State Board of Health, is composed of two other doctors, two druggists, and an attorney.

Barnett said "increasing development of new drugs and combinations of drugs and distribution to the consumers through both legitimate and illegitimate channels" made probable health hazards for Mississippi by "improper use of dangerous and habit-forming drugs."

In a press conference, the governor said Mississippi's drug control was not as rigid as other states. Barnett said the committee would determine the size and nature of the problems and

make recommendations for possible corrective legislation.

Physicians named to the committee are Dr. Gray, Dr. Robert E. Shands of New Albany, and Dr. John Lindley of Meridian. Other committee members are J. E. McDuffie of Aberdeen, Eddie Lee Brantley of Pascagoula, and District Attorney Roy Noble Lee of Forest.

Winning Scientific Exhibitor To Receive Mounted Medallion

The scientific achievement award, which will be given to the MSMA member presenting the best scientific exhibit at the 95th annual session, will be a mounted medallion. This was the announcement of Dr. C. G. Sutherland, chairman of the Council on Scientific Assembly.

Designed especially for MSMA by L. G. Balfour Company of Attleboro, Mass., the medallion will be engraved with the winner's name and the year. The front of the medallion carries the MSMA emblem and the founding date of the association. The back of the bronze medallion has a place for engraving and the inscription "That more may live longer in the richness and comfort of health."

The medallion, which supercedes the gold medal award of previous years, will be given annually beginning with 1963. Nonmember scientific exhibitors will compete for citation of honorable mention.

Set for May 13-16, the 95th Annual Session will have its headquarters in the Buena Vista Hotel in Biloxi. The scientific exhibit will be located in the Hurricane Room D and will be open only to registered members and guests.



The 1963 Scientific Achievement Award will be a mounted medallion. Front and back presentations are shown.

19 Mississippians Attend Tri-State Thoracic Meet



Mississippi representatives at the Seventh Annual Tri-State Consecutive Case Conference included (from left to right) Dr. John F. Busey, president of the Mississippi Thoracic Society, and Dr. Myra D. Tyler, Dr. Guy Campbell, and Dr. Rush Netterville, who presented case series. All are from Jackson. Nineteen state physicians attended the January conference which was sponsored by the tuberculosis and thoracic societies of Mississippi, Louisiana, and Alabama. Total attendance was 76.

Dr. Crenshaw Keynotes Mental Health Meet

In the keynote address before the 1963 annual meeting of the Mississippi Association of Mental Health, Dr. C. P. Crenshaw pointed out four important areas in the fight against mental disease.

The MSMA president told association members that top priority must go to personnel recruitment and training, with second, third, and fourth spots given to money, research, and adequate facilities.

Dr. Crenshaw continued, "These four areas are challenges for further progress. For example, facilities must ultimately be subdivided into those for other than the psychotic patient. There are the alcoholics, the drug addicts, retardees, seniles, and children who must also receive care. At community level, we ideally need follow-up services, outpatient facilities in appropriately staffed and medically supervised clinics, and neuropsychiatric beds in our community hospitals."

The challenge is clear, concluded Dr. Crenshaw, but progress can be made only through exercise of caution, realistic professional assessment of need, careful development of additional programs after existing institutions are strengthened,

and sensible application of capabilities in the light of new and greater knowledge.

In his opening comments, Dr. Crenshaw discussed progress on the state and national level in the fight against mental disease.

He told association members, "The medical profession is gratified over the enthusiasm of your association to contribute meaningfully toward better care for mental patients. Your response to opportunities of citizenship can and will weigh heavily in the final balance as we measure our abilities to overcome all disease."

The mental health meeting was held Jan. 22 at the King Edward Hotel in Jackson. Dr. Crenshaw addressed the luncheon session.

The morning program included reports of committee and chapter presidents. During the afternoon session a panel of physicians discussed mental illness treatment.

Five Lecturers To Address Arthritis Seminar

The second annual Arthritis Seminar will be held at the University of Mississippi School of Medicine on Thursday, Feb. 21. Five lecturers will talk on various aspects of rheumatoid disease.

Guest speakers are Dr. Robert L. Bennett, executive director of the Georgia Warm Springs Foundation; Dr. Mack L. Clayton, assistant clinical professor and orthopedic consultant to the arthritis clinic at the University of Colorado Medical School; Dr. Robert D. Gauchat, associate professor of pediatrics at State University of Iowa School of Medicine, and Dr. Daniel J. McCarthy, head of the rheumatology section in the Department of Medicine at Hahnemann Medical College.

Topics to be presented include long-term management of juvenile rheumatoid arthritis, gout and pseudogout, ambulation of the arthritic, and orthopedic surgery of rheumatoid feet. Patient presentations will conclude the seminar.

Presiders for the one-day event are to be Dr. Paul Derian, associate professor of orthopedic surgery, and Dr. Frederic McDuffie, associate professor of medicine and program coordinator.

The seminar is supported by educational grants from the Mississippi Chapter of the Arthritis and Rheumatism Foundation and by the State Board of Health. No tuition fee is required and attendance is approved for six hours of category 1 MAGP credit.

College of Surgeons Sets Sectional Meet

Management of multiple injuries during the first six hours, airplane accidents, the single unit transfusion, colo-rectal surgery, electrolytes, steroids, anticoagulants and antibiotics will be among subjects discussed at the three-day Sectional Meeting of the American College of Surgeons in Charlotte, N. C., Feb. 11-13.

More than 400 surgeons from throughout the southeastern part of the United States are expected to attend. All doctors of medicine are invited. Sessions will be held at the Queen Charlotte Hotel.

Dr. Paul W. Sanger, Charlotte, and his committee of North Carolina surgeons, have chosen authoritative lecturers in the many topics to be presented. Out-of-state guest speakers include Rudolf J. Noer, Louisville; John C. Burch, Nashville; Langdon Parsons, Boston; Alton Ochsner, New Orleans; Denton Cooley, Houston; Frank B. Berry, Washington, D. C.

Selected medical films will be shown daily.

The remaining two American College of Surgeons Sectional Meetings for 1963 are the annual four-day meeting for surgeons and graduate nurses, in Pittsburgh, Pa., March 11-14; and a three-day session in Toronto, Ontario, April 25-27. The 1963 Clinical Congress will be in San Francisco, Oct. 28-Nov. 1.



Copyright Mississippi State Medical Association

"Take the phone off the hook. It's another of those 'ask your doctor' commercials."

National Director Addresses Hinds Mental Health Meet



Mike Gorman, right, executive director of the National Committee against Mental Illness, addressed the annual meeting of the Hinds County Association for Mental Health. Dr. W. L. Jaquith, left, director, Mississippi State Hospital, Whitfield, introduced the speaker, and H. J. Massie, president of the association, presided. Mr. Gorman's topic was "Planning Comprehensive, Unified Services for the Mentally Ill."

UMC Adds Two To Faculty

A Jackson surgeon, Dr. William O. Barnett, has been appointed to a full-time position at the University of Mississippi School of Medicine. The Board of Trustees of the Institutions of Higher Learning in December named him an associate professor of surgery. Dr. Barnett had served on the clinical faculty at the medical school since 1955.

Dr. Barnett has his B.S. from Ole Miss and his M.D. from the University of Tennessee. He interned at Tampa Municipal Hospital and received his specialty training at Lutheran Hospital in Baltimore. He took additional training in the basic science of surgery and surgical anatomy at Pennsylvania and Maryland and has numerous publications to his credit on his research on gastrointestinal tract problems.

At the December meeting, the Board also appointed Dr. Glenn Gentry an assistant professor of microbiology. Dr. Gentry is returning to the University of Mississippi from the University of Wisconsin where he has been a research associate in the McArdle Laboratory for nearly three years. He received his Ph.D. in microbiology in the University Medical Center Commencement in 1960.

PERSONALS

WILLIAM L. BASS of Laurel has been named to a five-man Housing Board of Adjustments and Appeals by Mayor A. S. Scott. The appointment of the commission was necessary as a qualifying step to obtain federal assistance in future community development programs.

ELDON A. BOLTON has been named staff president and MAX A. CURRY chief-of-staff of the Biloxi Hospital. Other officers are W. S. SEKUL, vice president, and PAUL L. HORN, secretary-treasurer.

A. E. BROWN has been awarded a Legion of Merit citation for 25 years of service with the Columbus Kiwanis Club.

WALLACE E. CALHOUN has been appointed to the Moss Point school board.

H. L. FLOWERS and R. B. FLOWERS have announced the association of ROBERT T. LOTT. Dr. Lott is a native of Kilmichael and received his medical degree from the University of Tennessee. He interned at Baptist Hospital in Memphis and practiced at Hickory Flat, Miss., for six months prior to entering the armed services.

JAMES W. HOLMES has joined HUBERT F. CAMPBELL, GORDON S. MCHENRY, and ROBERT W. PREVOST, JR., on the staff of the Wiggins Clinic. Dr. Holmes has recently completed his residency in surgery at the Methodist Hospital in Memphis. He received his medical degree from the University of Tennessee School of Medicine.

JAMES W. JACKSON of Aberdeen has won the case diagnosis contest sponsored by *General Practice* for the third time within three years. *General Practice* is a medical journal of national circulation which is edited in Los Angeles.

I. C. KNOX, JR. has been elected president of the Vicksburg Chamber of Commerce for 1963.

HOWARD A. NELSON has been elected first vice president of the Greenwood Chamber of Commerce which post is also that of president-elect.

ROBERT W. PREVOST has been named to the board of directors of the Wiggins Kiwanis Club.

JAMES H. WADDELL has been named "Man of the Year" by the *Ocean Springs News*.

PRENTICE WALKER has been named president of the Hattiesburg Exchange Club.

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NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION
JACKSON, MISSISSIPPI

February 1963

Dear Doctor:

Compulsory federal medical care for the aged under Social Security will be JFK's Valentine gift to the 88th Congress. The special message, to be sent from White House to Capitol Hill on February 14, will trigger opening gun for 1963-64 administration campaign, picking up where ill-fated Forand and King-Anderson bills left off.

> Regardless of what proponents claim and by whatever sweet-sounding name called, new bill will differ little from old. Social Security vehicle, federal controls, and old familiar features will be prominent, despite minor changes aimed at making socialism more palatable and helping enactment.

The world's best known medical missionary didn't like US-UN Congo action and openly said so. Dr. Albert Sweitzer, Gabon physician-theologian-philosopher, said Katanga take-over was "judicially unjustifiable" and that independence-seeking state should not have been forced to accept obligations of new Congo nation.

Physicians and public are in for rare treat February 21 when Chamber of Commerce of U.S. brings 1963 legislative aircade to Jackson. Program includes top speakers, moves fast, is all-meat-no-fat, and even provides luncheon in $7 registration fee. Make checks payable to Chamber of Commerce of U.S. and send to Jackson Chamber of Commerce for reservations.

Comprehensive study of poisonous snake bites in Florida is underway as joint effort of physicians, Board of Health, and special Governor's committee. Post card reports of bites are being catalogued with notes on clinical management. Florida Medical Association says snake bite problem is much greater than originally thought and probably is increasing.

Italy's 83,000 physicians staged a 48-hour strike in mid-January, protesting starvation fees and endless paperwork of socialized medicine. Doctors picketed social insurance offices during strike and medical society at Rome called on national association to denounce all government restrictions on care of patients. Provision was made for care of emergencies during walkout.

Sincerely,

Rowland B. Kennedy
Executive Secretary

DATELINE - MEDICAL AMERICA

City And State Hassle Over UMC Traffic Egress

Jackson - The capital's city fathers and state officials are at odds over a "medical" issue, the matter of a traffic light at North State Street main entrance to University Medical Center. In- and out-bound auto and pedestrian traffic are subjected to delays but city says proposed stop light would do more harm than good. The otherwise minor dispute takes on major significance in that city wants state lands away from campus but state says nix until UMC traffic problem is settled.

Federal Government Will Crack Down On Drug Studies

Washington - Effective February 7, Food and Drug Administration will slap new controls on clinical trials of new drugs, including antibiotics. Thenceforth, FDA must receive advance notice of investigation, trials can be begun only after adequate animal studies, investigators must be "qualified," and FDA informed of any adverse results which could terminate trials. Old regulations required neither advance notice nor subsequent reports.

Insurance Industry Ponders 'Overinsurance' In Health Underwriting

New York - Two major life insurance organizations and that representing health insurance carriers are studying new findings on Americans who are overinsured in group health coverage. Profit from illness, study says, makes difficulties in claims cost control and causes friction between carriers and care providers. Major trouble comes from working wife coverage and industry may propose to apply overinsurance against one type of health service to another not adequately covered.

California IBM Computer Doesn't Like Social Security Health Care

San Francisco - California Medical Association may have settled once and for all the debate over voluntary prepayment versus King-Anderson-type legislation for compulsory care of aged under Social Security. Researchers "fed" CMA's computer data on over-65 citizens in state, amount of Social Security tax increase to finance K-A, Blue Shield-Blue Cross costs, benefits of each, and pushed the "go" button. Non-partisan IBM said voluntary coverage is $17 million per year cheaper for California aged than K-A and gives greater care benefits.

State Control Of Radiation Grows With New Enactments

Chicago - The American College of Radiology reports that 15 states have passed laws enabling them to assume control over sources of ionizing radiation from Atomic Energy Commission. Two states, Mississippi and Michigan, needed no new laws. Only four states, Kentucky, California, Mississippi, and New York, have actually concluded AEC agreements and assumed control.

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In accepting advertising for publication, the JOURNAL has exercised reasonable precaution to insure that only reputable, factual advertisements are included. Nevertheless, claims made by advertisers in behalf of goods, services, and medicinal preparations, apparatus or physical appliances are understood to be those of the advertiser. Neither sanction nor endorsement of such is warranted, stated, or implied by the association.

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Articles for Publication

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A thesis summary of 75 to 100 words must accompany each manuscript separately from the text. Figures and drawings are acceptable when prepared with black ink on white paper. Photographs for illustrations should be unmounted, untrimmed, glossy prints and all such material must be identified. No charges are made to authors for illustration engravings not exceeding four column inches per printed page.

Reprints may be obtained at cost from the association. The right is reserved to decline any manuscript for publication. Ordinarily, manuscripts submitted will be acknowledged whether published or not.



A few positions on the Medical Staff of the Kennedy Veterans Administration Hospital, Memphis, Tenn., are now available to physician applicants. These vacancies exist in the Medical Service, which includes Pulmonary Diseases, and General Medicine in the Admitting-Outpatient Service. Physician's salaries are commensurate with professional qualifications and experience. Board certification permits 15 per cent additional salary. V.A. benefits include family hospitalization plan, with medical and surgical coverage, Federal Life Insurance, periodic pay increases, regular working schedules, and liberal retirement factors. Interested physicians may write the Chief of Staff, Kennedy Veterans Administration Hospital, Memphis 15, Tenn.

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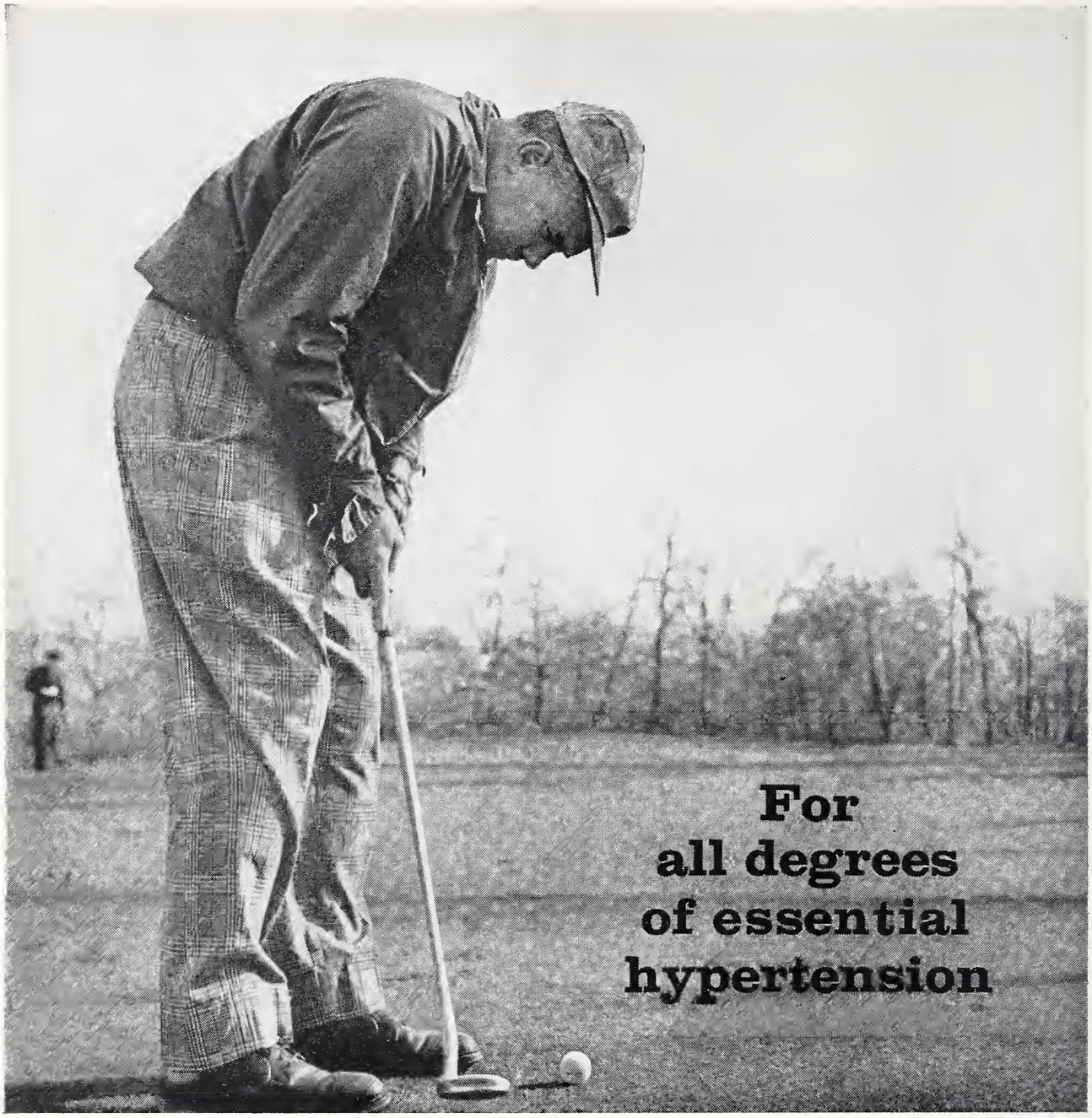
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NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION
JACKSON, MISSISSIPPI

March 1963

Dear Doctor:

Cuba, tax reform, and the out-size budget have slowed New Frontier to a 50-mile walk on compulsory Social Security care for aged. JFK delayed message to Congress and bill introduction past planned date and chances for enactment in House this session are being questioned.

> Congressional conservatives who oppose King-Anderson-type plan are urging full Kerr-Mills implementation at state level. To date, 39 states and territories have adopted OAA or MAA aspects and more, including Mississippi, are pushing for full programs.

"Pharmacogenetics" is Food and Drug Administration's new term for study of drugs suspected of influencing birth deformities. Drug industry is bracing for new onslaught against antihistamines, diuretics, and even antibiotics by thalidomide-conscious authorities. FDA investigation chief Frances O. Kelsey said in recent address that many well-known drugs are already under investigation.

The nation's biggest butter-and-egg men, 50-member board of directors of National Dairy Council, are on a milk-product weight control diet. Cholesterol notwithstanding, the butterfat barons, in a sample menu, eat two eggs, five pats of butter, three glasses of milk, and a hunk of cheese, claiming to hold to 1,800 calories a day. Idea is to discredit what they call "bizarre" reducing fads.

The surgeons may have to take over American medicine the first week in April, what with most medical men off for key meetings. American Academy of General Practice meets at Chicago April 1-4, while American College of Physicians convenes at Denver April 1-5. Both meetings will be tops in scientific excellence.

Most useful purpose served by kooky new 50-mile hike is to provide successor to ice cube tossing, eight-men-in-Volkswagen, and panty raids. News headlines suggest three possibilities, however: RFK made it, Pierre Salinger chickened out, and AMA says "don't."

Sincerely,

Rowland B. Kennedy
Executive Secretary

DATELINE - MEDICAL AMERICA

Medical School Tuition Fees Reflect Meteoric Rise

Evanston, Ill. - The Association of American Medical Colleges says medical school tuition fees are up as much as 202 per cent in 30 years and still pay a smaller portion of the new doctor's education tab. Latest report shows top rise in privately endowed schools with lesser increases for public supported institutions where jumps ranged from 145 to 161 per cent. But operating costs for schools have risen much more, AMA says, pointing out in similar report that tuition amounts to only 6.4 per cent of school income.

Government Is Worried Over Liability Suits

Washington - Federal authorities are privately nervous over mounting claims for alleged malpractice against hospitals of U. S. Public Health Service, Veterans Administration, and military services. Pending suits total almost $33 million, three times that of a year ago. Puzzler is that USPHS, VA, and military medicine is under same accreditation and certification standards as private care.

AHA Will Sponsor Disease Classification Center

Chicago - The first U.S. central office on international classification of diseases will open in May at American Hospital Association headquarters, a joint effort of AHA, American Association of Medical Record Librarians, and USPHS' National Center for Health Statistics. The decimal classification system code is maintained by the World Health Organization and used extensively in health care and research. New center will "Americanize" system, furnish clearing house services, and assist in education programs on proper use.

Liberals Fail On Latest Committee Pack Effort

Washington - Southern senators held the line and prevented packing of the Senate Committee on Finance by administration liberals. Present composition of 11 Democrats and six Republicans will hold in 88th Congress with Virginia's conservative Harry F. Byrd as chairman. This is key group which would consider any King-Anderson-type legislation in senate.

Privilege Law Bars Suicidal Intent Disclosure

New York - A U. S. circuit court of appeals ruled that New York's privileged communication law does not permit a physician to testify and disclose a patient's telling him of a suicidal intent when under treatment for an unrelated condition. The court said privilege held even though patient volunteered such information. Decision could affect some workmen's compensation laws which waive privilege. Citation is Massachusetts Mutual Life Insurance Co. v. Brei, 31 L.W. 2267 (2nd Cir., Nov. 20, 1962).

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ORIGINAL PAPERS

Eventration of the Diaphragm: Report of a Case Associated with Pregnancy

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Eventration of the diaphragm, an abnormal elevation of a portion or the entire leaf of one or both diaphragms, is a potentially serious complication of pregnancy. Rupture of the affected diaphragm may occur during pregnancy—especially during the final stage of labor with bearing down efforts of the patient. The author discusses diagnosis and management and presents a case report.

EVENTRATION OF THE DIAPHRAGM is a rare, potentially serious complication of pregnancy. The condition is an abnormal elevation of a portion or the entire leaf of one or both diaphragms as a result of aplasia, paralysis, or atrophy.[1, 2] Other suggested names for eventration include "idiopathic high-lying diaphragm," "relaxed diaphragm," "insufficiency of the diaphragm," "elevation of diaphragm," and recently "neurogenic muscular aplasia of the diaphragm."[1, 3]

Petit has been credited with giving the first accurate description of this condition in 1774.[4] The diagnosis was difficult prior to roentgenograms, and in 1913, Bergman was able to collect only 32 cases in the world literature.[5]

In 1954 only 300 cases had been reported. Kinzer and Cook reported eventration of the diaphragm in 35 of 412,149 armed-forces inductees who underwent routine roentgenographic examination of the thorax.[6] In Denmark, 38 eventrations were found in 107,778 x-ray examinations.[1] In a study of 2,500 newborn children, Beck and Motsay found three that had severe respiratory difficulty due to elevated diaphragm.[7]

The first successful repair was accomplished by Morrison in 1923 on a 10-year-old girl.[8] The condition is more common in males than females, the ratio being about 2:1. The left diaphragm is involved more frequently than the right.[4]

Only a few cases of eventration associated with pregnancy have been reported in the literature. The discovery of eventration in the childbearing age is quite important because it may turn out to be a menace to life. The literature repeatedly refers to a case in which rupture of the diaphragm occurred during labor resulting in the death of the patient.

ETIOLOGY

Eventration may be congenital or acquired in origin and both types may be partial or total in extent.[1] In the congenital elevation, weakness is not truly total since the anterior portion does not have the same anlage as the posterolateral portion and does not take place in the eventration. Other anomalies may occur with eventration and

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the lung on the affected side is usually small and hypoplastic.[2, 9]

Acquired eventration may be due to phrenic nerve or muscle involvement. Irritation of the phrenic nerve by tumor, infection, or fibrosis may result in temporary or permanent injury.[1, 2] Several cases have been associated with tuberculosis.

Acquired partial eventration may be due to local muscular weakness from contiguous inflammation, segmental nerve damage, or incomplete recovery after complete nerve paralysis.[1] As the diameter of the local weakness diminishes, its resemblance to diaphragmatic hernia increases, with increasing likelihood of incarceration of bowel on the left and liver on the right.[1]

PATHOLOGY

The line of attachment of the affected diaphragms has always been about the normal levels. The pleura and peritoneum are always normal. The diaphragm varies from a layer of connective tissue containing some muscle to a thin translucent membrane.[3] The central and medial portions of the leaf are more frequently affected, leaving the periphery uninvolved. The area of eventration microscopically shows deficient or degenerated muscle fibers.[1]

The individual nerve fibers are normal, but the phrenic nerve is small. There is no evidence of degeneration in the nerve fibers or in their nuclei of origin.

DIAGNOSIS

The majority of patients with eventration of the diaphragm are asymptomatic. When symptoms are present, they are referable to the respiratory, digestive, or cardiovascular systems. In adults the most common symptoms are dysphagia, epigastric pain, heartburn, and belching. Cardiovascular symptoms which may occur include palpitation, tachycardia, and pain simulating coronary insufficiency.[1, 4] Cough, wheezing, dyspnea, pain in the chest, cyanosis are some of the respiratory symptoms elicited. In the infant, serious respiratory difficulty may develop with episodes of severe dyspnea and cyanosis, and these may be fatal. The severe symptoms in the infant are due to the shift of the labile mediastinum with inadequate ventilation of the opposite lung and torsion of the heart and great vessel. If no symptoms occur during the first five years of life, the patients will usually be without symptoms until the fourth or fifth decade when decreased cardiopulmonary reserve together with increased intra-abdominal pressure due to obesity, obstipation, or tumor may precipitate digestive or respiratory symptoms.[1]

Abnormal physical findings are usually absent in cases of partial eventration. In many cases of total eventration, little information can be determined by physical examination. Diminished breath sounds and diminished or absent vocal fremitus may be noted over the lower pulmonary field posteriorly and laterally on the side of the lesion. Bowel sounds may be heard in the chest. On the affected side, a decrease or absence of respiratory excursion may be noted. The area of cardiac dullness and the apex beat may be displaced to the opposite side of the lesion. Hoover's sign is present when the diaphragm is sufficiently elevated or paralyzed.[3] This sign is an exaggeration of the widening of the subcostal angle and the outward movement of the costal margin on the affected side during inspiration.

The diagnosis is usually established by radiologic examination. Anterioposterior, lateral, and oblique views of the chest reveal an abnormally high position of the affected diaphragm presenting as a smooth unbroken arc with no abdominal viscera above it.[4] The decrease or absence of respiratory excursion of the affected diaphragm is noted at fluoroscopy. Often stomach and colon x-rays are needed to rule out diaphragmatic hernia. Pneumoperitoneum is another method used to distinguish between elevation of the diaphragm and the true hernia. Phrenic nerve stimulation is of no value in the diagnosis. Bronchoscopy and bronchograms may occasionally be of value in adult patients. At times, surgical exploration is the only method of making a correct diagnosis.

The following is a case report of an eventration of the diaphragm associated with pregnancy.

CASE HISTORY

This 17-year-old white female, gravida 1, para 0, was first seen on July 21, 1961, because of lack of menses for six months. Her only symptoms were nausea and breast tenderness for one month. Her menses had always been irregular.

Past history showed that at the age of seven, after a bout of whooping cough, a chest x-ray had been made which revealed the heart to be on the right and the left diaphragm to be elevated. She was sent to the Mississippi State Sanatorium for further evaluation. Barium introduced in the stomach extended up into the chest to the seventh rib posteriorly, and the esophagus was noted to be of normal length. A barium enema showed that the splenic flexure of the colon rose definitely above the normal level of the left diaphragm, but the colon was in no place constricted as though

passing through a narrow diaphragmatic opening. Fluoroscopy revealed no motion of the left diaphragm, whereas the right moved normally. The impression was eventration of the left diaphragm. Because of the large size of the abnormal area, obstruction was not thought to be likely and, therefore, surgical exploration was not recommended.

At age 15 she was admitted to the Forrest County General Hospital for a tonsillectomy. X-ray studies were repeated and revealed the same findings.

Physical examination during the July 21, 1961, visit showed a blood pressure of 112/60 and pulse of 80. The heart clinically was thought to be slightly to the right. The defect could not be definitely elicited by auscultation and percussion

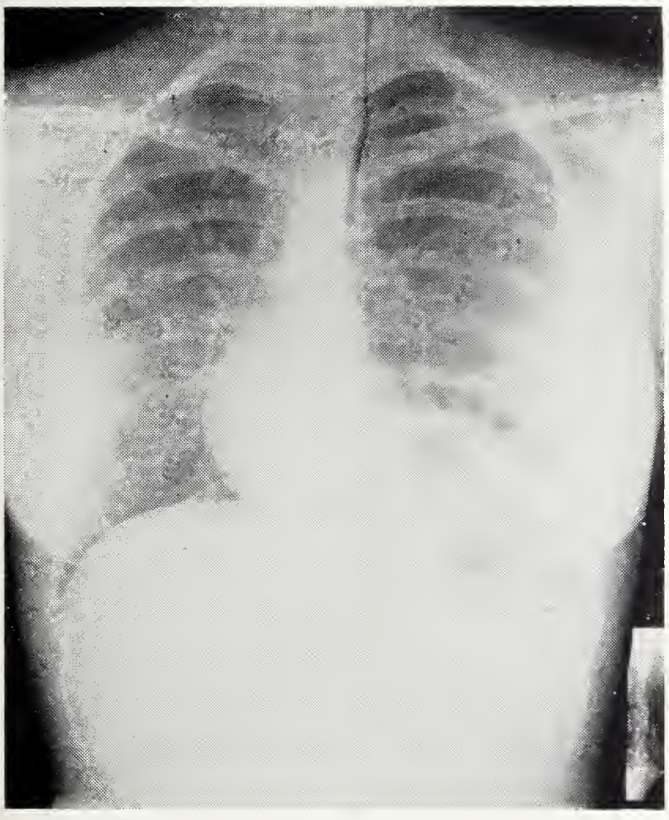


Figure 1.

of the lung fields. Pelvic examination revealed her to be two months pregnant.

Figure 1 is a PA of the chest taken during this pregnancy. The elevated diaphragm on the left is noted with a thin unbroken line. Figure 2 is a left lateral which illustrates the eventration even better than the first. Again the well-outlined top of the diaphragm is noted. Figure 3 is part of a GI series taken when the patient was 15 years old. The stomach is seen to be rotated and extending up into the left chest.

The patient and her family were quite alarmed over the prospects of pregnancy. Several phy-

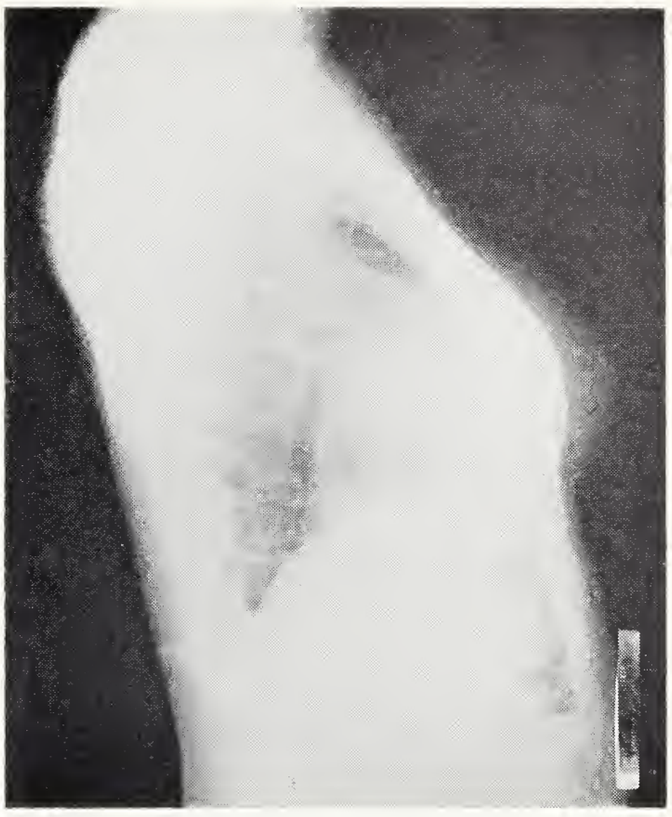


Figure 2.

sicians had told them that the patient should probably never become pregnant and, if she did, that she should have a cesarean section because of the weak diaphragm.



Figure 3.

Her prenatal course was uncomplicated, however, until the last month when she complained of considerable left upper quadrant discomfort. During this time she vomited on several occasions but responded rapidly each time to symptomatic treatment. Her exact EDC was unknown, but it was thought to be about Feb. 15, 1962. A cesarean section was planned for Feb. 9. However, on Jan. 29, 1962, her membranes ruptured. The cervix was 2 cm. dilated and the vertex at minus 2 station. It was elected to proceed with the cesarean section, and a 6 lb. 6 oz. female infant in good condition was delivered through a low segment transverse incision. The anesthesiologist elected to use general anesthesia with an Anectine drip. Careful exploration at the time of surgery confirmed the diagnosis of eventration. She tolerated surgery well and had no unusual changes in her vital signs. The postoperative course was uneventful.

DISCUSSION

In the literature, there has been some confusion in the reporting of cases between eventration and diaphragmatic hernias. The diaphragmatic hernias, other than those of minor degree about the esophageal hiatus, may also be potentially grave complications of pregnancy.[10] Rigler and Eneboe found that the esophageal hiatus type is commonly seen during radiologic examination in late pregnancy.[11] It seldom causes serious trouble and often is asymptomatic. Only the cardiac portion of the stomach is usually involved in these hernias. However, hernias of any type which are large enough to allow other abdominal viscera to pass into the thoracic cavity are of grave importance. The dynamics of respiration are disturbed causing a decrease in the negative intrathoracic pressure, collapse of all or part of the lung on the involved side, and displacement of the mediastinum to the opposite side with impairment of the function of that lung. The dangers of incarceration, strangulation, and perforation are always present. During late pregnancy the intra-abdominal changes increase these dangers and the expulsive forces of labor make them more critical.[10] Mengart and Murphy proved experimentally that labor causes an increase in intra-abdominal pressure.[12]

There have been 15 cases of strangulated diaphragmatic hernia accompanying pregnancy reported in the literature. Nine of these patients died, resulting in a high mortality rate for this complication. The causes of death have been anoxia due to respiratory difficulty, aspiration of vomitus, rupture of viscera with shock or peritonitis and strangulation of viscera.[10]

While the dangers of incarceration are great in diaphragmatic hernia, there is less likelihood of this occurring in eventration.[13] The reason for this is that while intestinal or other abdominal contents are deep in the thoracic cage, none are to be found above the diaphragm. The chief danger in eventration is the rupture of a thin membranous diaphragm especially during labor when the intra-abdominal pressure is greatly increased. However, in a review of the literature, only one such case was found resulting in the death of the patient.[2] Another concern during labor is mediastinal shift and sudden death. The sudden evacuation of the thoracic contents and pressure at the time of delivery and the lowering of abdominal pressure may cause a shock-like state such as is occasionally seen following abdominal paracentesis for ascites.[13]

In two cases of eventration in the seventh month of pregnancy, symptoms of congestive heart failure have occurred. Both improved toward the end of pregnancy. This possibly was because the greatly increased fluid volume of the seventh month was just too much for a heart in a displaced position. Other cases have complained chiefly of epigastric pain and dyspnea.

It is generally agreed that in either eventration or large diaphragmatic hernia, pregnancy should be terminated without allowing expulsive efforts on the part of the patient. Many feel that cesarean section should be the method of delivery. Others believe that delivery from below with the use of caudal anesthesia and forceps is the method of choice.[10] From the literature, it is impossible to say that one method is definitely superior to another. In our patient the eventration was considered to be of moderate degree. In view of the available information, we elected to deliver the patient by cesarean section. By careful management with either method, the mortality rate should be very low.

The problem arises as to what should be done if a patient early in pregnancy is discovered to have an eventration or a large diaphragmatic hernia. In a patient with an asymptomatic eventration, surgery is not indicated. When symptoms are severe, however, surgery may be indicated in the early pregnant or in the nonpregnant patient. Every patient with a large diaphragmatic hernia probably deserves an attempt at repair if

it is discovered during the first two trimesters.[10] Evidence of obstruction, strangulation, or perforation is an indication for immediate surgery at any stage of pregnancy.

SUMMARY

Eventration of the diaphragm is a rare, potentially serious complication of pregnancy.

The condition is an abnormal elevation of a portion or the entire leaf of one or both diaphragms.

Most cases are congenital in origin but eventration may be acquired by phrenic nerve or muscle involvement by infection, tumor, or fibrosis.

Rupture of the affected diaphragm may occur during pregnancy especially during the final stage of labor with "bearing down efforts of the patient."

The diagnosis of eventration of the diaphragm is usually not difficult and may be suspected on physical examination. The diagnosis is confirmed by radiologic studies.

Diaphragmatic hernias, other than the common minor degree esophageal hiatal hernias, may also produce serious consequences during pregnancy.

Delivery by cesarean section is favored by many for both conditions, while others prefer caudal anesthesia and vaginal delivery.

A case history of a 17-year-old primigravida with eventration of the left diaphragm is presented. Delivery was accomplished by cesarean section with no complications. ★★★

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A REAL GASSER

Some years ago, the Massachusetts Historical Society voted to erect a monument to the discoverer of anesthetic agents, but a spirited debate ensued as to who that was—Morton or Jackson. Oliver Wendell Holmes came forward with the recommendation that the memorial feature busts of both with the inscription: *To Ether.*

—A. S. Gregory, *Coronet*

Maxillofacial Aspects of Automotive Injuries

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Crash injury studies have shown that the body areas most frequently affected in highway automobile accidents are the head and neck, chest, and extremities. In this paper the author discusses maxillofacial injuries, diagnosis, and treatment.

LAST YEAR APPROXIMATELY 40,000 persons were killed and 5,000,000 injured in highway automobile accidents. Of these injuries, 20 per cent were classified from severe to critical. Cornell crash injury studies and other similar studies have shown that the body areas most frequently affected are head and neck, chest, and extremities from impact from the steering assembly, the dashboard and windshield, and ejection. These facts considered, it is most important that physicians understand the mechanism of maxillofacial injuries caused by automotive accidents and the principles of surgical repair as well as the medical proposals which have been advanced for their prevention.

INJURIES OF THE LARYNX

The larynx is well protected from external trauma by the chin and by its mobility, but injury may ensue from such intrinsic causes as infection, allergic edema, the inhalation of foreign bodies, chemical fumes, and gases or fire. Direct trauma to the neck and larynx occurs often to the driver of an automobile when the accident causes contact of the larynx with the steering wheel. In industrial accidents, occasionally there is direct trauma to the larynx when the neck is caught between two moving objects, such as moving trains or elevators.

The motor nerves to the larynx are the recurrent divisions of the tenth cranial or vagus nerve. These fibers may be injured as a result of skull fracture as well as from many other lesions involving the neck or chest.

All laryngeal disorders result in hoarseness of varying degree, perhaps aphonia, and difficulty in breathing, which may range from stridor on exertion to complete occlusion of the airway necessitating tracheotomy. Whenever hoarseness develops and persists, a laryngeal examination should be carried out with care, if necessary by direct inspection.

Most fractures of the laryngeal cartilage can be reduced during the first few days after injury by closed or open reduction. If the deformity from fracture is not corrected at that time, the airway and the voice may be permanently altered by cicatricial formation and contracture.

The surgical correction of this most serious problem is then difficult for the goal is to establish an adequate airway without damage to the voice. Many different operative procedures have been devised to accomplish this end. They largely concern themselves with the excision of scar, the insertion of acrylic resin mold to maintain the lumen while healing, and the use of skin grafts and cartilage grafts in order to maintain the airway. A tracheotomy tube must be worn during this period. At times it may be necessary to remove an arytenoid cartilage to establish an adequate airway after bilateral paralysis of the recurrent motor nerves.

Most injuries to the larynx can be studied by use of the mirror or the direct laryngoscope and can even be photographed in either still or motion pictures. By the use of motion pictures, the function of a distorted or injured larynx can be contrasted with that of the normal larynx.

FACIAL AND MAXILLARY INJURIES

The soft tissue of the face and the bony structure of the face and jaws are frequently injured from blows of external violence. This is particu-

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larly true in automobile crashes by impact of the face and jaws against the steering wheel, windshield, or dash. It has been estimated by the National Safety Council that in 1959 some 5,000,000 people were injured in automobile accidents. Since we know from statistical studies that the majority of these injuries concern the head and face, their treatment occupies a prominent place in the average doctor's practice.

We have also found from statistical studies that 20 per cent of these automobile injuries are classified as from severe to critical. Since some 25 people are injured every ten minutes, and since it has been estimated that one in ten will be injured sometime during each coming year, the seriousness of this problem must be recognized and steps taken for prevention.

These automobile injuries frequently involve the accessory sinuses, the skull, brain, orbit, eyes, and jaws. The otolarynologist, by his training, is equipped to handle their care better than others who lack intimate knowledge of the anatomy and and physiology of the head and face. While the treatment is primarily his responsibility, he must work in association with the neurosurgeon, the ophthalmologist, the orthodontist, and the dentist, for their combined special knowledge and skill are often called upon for the treatment of these severe injuries.

Initial treatment is largely concerned with control of hemorrhage, either by local packing, ligation of bleeding vessels, or ligation of the efferent artery at some point distal to the wound. The treatment of shock is quite important since it is so often present in marked degree in the more severe cases. All attempts at repair should be postponed for the time being; failure to consider shock may well bring about the death of the patient. One should also consider the type and condition of the wound, for this is the time to administer tetanus, gas bacillus antitoxin, and/or antibiotics. Due consideration must be given to the patient's sensitivity to horse serum, which in many instances creates an additional problem. Since so many of these cases are the result of automobile accidents and since so many are brought to the hospital in an unconscious state, it has been suggested that motor vehicle officials list in the operator's license the licensee's blood type, sensitivity to various drugs, and whether he is a diabetic taking insulin.

The examination should be carried out in great detail in regard to the needed repair and the patient's general condition. If we are suspicious of intracranial injury, it is quite important to keep a record of the blood pressure, respiration, and pulse, as well as to note whether there is a discharge of spinal fluid from the wound. It might well be that treatment of intracranial injury is of primary importance and neurosurgical consultation should be sought. Again, there might well be some serious general surgical condition which should receive the primary attention.

Granted that these possibilities do not present themselves, then we may continue with our own consideration of the facial injuries. First, inspection will tell us whether deformity is present and, with palpation, should give us a rather clear picture of the type and degree of injury as well as an outline of the procedure to be followed in its repair. Transillumination of the sinuses may be sufficient in the less severe cases. Otherwise x-ray studies of the skull and sinuses should be done. While it is true that the multiplicity of lines and shadows in this region makes interpretation of x-rays difficult, careful consideration and measurements often show clearly the type and degree of fracture present and the presence of blood or infection in the various sinuses.

Complete repair can usually be done at this time. In some cases, however, we must be content with temporary repair after due consideration of the necessity for future plastic procedures. When this is true, then it is important to conserve as much skin, mucous membrane, and bone as possible to aid the future steps in plastic repair. For instance, the suturing of skin to mucous membrane, the anchoring or transposition of viable bone fragments, and the maintenance of adequate blood supply are all of importance at this stage.

Local anesthesia is usually sufficient, e.g., cocaine or some of the newer synthetic preparations as a topical application, and procaine injected subcutaneously. At other times it may be best to use general anesthesia and tracheal intubation. The danger of vomiting after the wiring together of teeth should always be considered, and every precaution should be taken to prevent it.

When infection has set in or is already present, adequate drainage following surgical principles must be instituted, and cultures should be made. We are particularly afraid of the staphylococcus since it is the usual cause of osteomyelitis. As a result of sensitization studies, we can choose the antibiotic which would be most effective against the type of organism present.

Blood transfusions are widely employed in severe infections and injuries and their importance needs to be emphasized at this point.

After due consideration of all preliminary studies, the time of repair must be considered in regard to swelling and the patient's general condition. As a rule these fractures can be readily reduced any time within a week or ten days, yet

the earlier reduction is done the better. This means that as soon as the swelling has subsided, the operation should be carried out. The details of treatment largely resolve into a reversal of the direction of force, with adequate fixation of the fractured parts and, at the same time, debridement, suture, and restoration of the soft parts to restore function and prevent deformity.

It should also be remembered that practically all of these fractures are compound, i.e., they communicate with the outside world, either externally or internally through the nose and sinuses or both, so that due regard must be given in each case to subsequent or existing infection as well as to interstitial emphysema and hematomata.

EXTERNAL NOSE INJURIES

The rigid elements of the external nose are composed of the nasal bones and the nasal processes of the maxillae, except for a few cases of congenital variation. The remainder of the nose is composed of resilient cartilage and, except for dislocation and displacement at its bony junction, it very seldom enters into the deformity. Therefore, the problem largely resolves itself into reduction of the displaced bony fragments by reversal of the fracturing force.

Since deformity is evident, firm pressure with the surgeon's thumb will readily correct the dislocation, and the result can be immediately ascertained. In some instances it may be necessary to employ an elevator intranasally, or forceps, especially in those cases where there is a depression of the bony parts. Reduction is usually accompanied by a sharp click as fragments assume their normal position; seldom is splinting necessary. We merely depend on a piece of adhesive across the nose, with or without a small roll of gauze underneath, to remind the patient and his friends that the nose should not be touched during the healing period.

In the more severe cases of compound fracture, there may be an actual loss of bone and soft tissue. It is in these cases that the surgeon should consider future plastic work, such as the introduction of rib cartilage, tube grafts, and the conservation of skin and mucous membrane and any viable bone fragments. Therefore, each case is a law unto itself, and only general principles need be considered.

Debridement should be carefully done in all lacerated wounds. The proper placing of subcutaneous sutures and skin sutures will materially lessen deformity and scar.

NASAL SEPTUM INJURIES

The septum is practically always involved in fractures of the external nose and, in many instances, where there is no evident fracture of the external nose. Even infants and young children often present deformities of the septum which can be explained only by blows on the nose which were disregarded or forgotten. These injuries undoubtedly account for many of the septal deformities seen in later life.

When one considers the component parts of the septum, namely the perpendicular plate of the ethmoid, the vomer, the septal cartilage, and the vomeronasal cartilages, he readily understands why blows on the nose produce deformity at the junction of the vomer with other septal parts. Unfortunately, even when this condition is recognized at the time of the injury, little can be done to correct it because of the resilience of the cartilage. These injuries are nearly always very difficult to reduce, or to hold in place after reduction, so in spite of our best efforts we must often depend on future submucous resection to restore function.

Hematoma is often found after these injuries and, when large enough to produce obstruction, should be drained by incision through the mucous membrane. When not drained, hematomas tend to become infected or to heal with a resultant fibrous mass of scar tissue. This produces obstruction to aeration.

FRONTAL SINUS INJURIES

Fractures involving the frontal sinus are potentially the most dangerous of all because of the anatomic relationship to the brain and meninges. It is not uncommon to find these fractures extending into the vault or base. Hence, neurologic vigilance is important. Fractures into the orbit are also frequently seen. These menace the important structures contained in the orbit.

As complications we may look for meningitis, brain abscess, orbital abscess, and osteomyelitis as the most serious. It is primarily to prevent these that early and adequate treatment is of such importance. It should always be borne in mind that fracture here may involve the anterior wall or the posterior wall of the frontal sinus or both. Therefore, doubtful cases should be explored surgically to determine the exact extent of injury, to remove

bone fragments, and to institute adequate drainage.

When the wound is open externally, we are usually able to inspect the sinus through the original wound. Otherwise we advise the usual curved incision through the unshaven brow, and inspection by removal of the floor of the sinus, which leaves very little scar and no deformity. It is only by adherence to this apparently drastic principle that we can prevent future serious complications.

When it is found that the fracture involves the anterior wall only and presents no deformity and no injury to the integument, no treatment may be necessary other than close observation during the healing stage. Blood clot may be present within the sinus in many cases, but it may also be readily absorbed and need not be considered a cause for worry. However, if at any time during the healing phase we become doubtful as to the condition of the sinus, we advise exploration.

When a frontal sinus is explored, either externally through the original wound or by operation through the brow, we carefully remove all blood clots and loose fragments of bone, then inspect the posterior wall for possible injury and see that adequate drainage is established, either externally, if the original wound is suitable, or, preferably, intranasally by a polyethylene tube inserted through the nose to the depths of the sinus and allowed to remain in situ until the wound is well healed. In the presence of large anterior defects, external drainage is justifiable, conserving all bone and periosteum whenever possible to prevent deformity. In all other instances, we advocate intranasal drainage.

When the posterior wall of the frontal sinus is found to be involved, the entire mucous membrane should be removed and the edges of the fracture carefully inspected. In these cases, our procedure is analogous to similar situations encountered in mastoid surgery, that is, to remove bone fragments from the dura and to enlarge the defect until we are sure we have uninjured dura. Should the dura be torn, it should be repaired and external drainage provided. We often block off communication with the nose by packing in the region of the ostium. After nature has walled off this area, we may do a secondary closure of the external wound and then concern ourselves with the cosmetic result. When the posterior wall is fractured but the dura is uninjured, our procedure is the same, except that we employ intranasal drainage.

In order to prevent interstitial emphysema, all patients with fractures involving the accessory sinuses should be cautioned about blowing the nose, but this warning is particularly important when the frontal and ethmoid sinuses are injured. As has been previously stated, neurologic vigilance is important, and it might be added that bacteriologic vigilance is also important, not only to prevent infection but also to determine the type should infection occur.

In our experience with brain abscess and osteomyelitis, the staphylococcus is nearly always the offending organism. We are constantly on the watch for it in order to protect our patient as early and as well as possible by securing sensitivity studies on the type of bacteria present and by the adoption of the proper antibiotic drug.

ETHMOID SINUS INJURIES

The ethmoid is involved more often than any other sinus. While the potential danger of complications is great, fortunately we do not meet them so often as in frontal sinus fractures. The relationship to the brain and meninges and the orbit must be remembered. It is of particular importance here to caution the patient against blowing his nose because of the likelihood of creating an interstitial emphysema and thus increasing the danger of meningitis and orbital infection.

Fractures through this region seldom present much deformity, so correction of the external nose deformity in the milder cases is usually sufficient. In those cases of severe injury with loss of tissue, we can restore some order by working through the external wound and, in those with transverse facial fractures, through the ethmoid and orbit. Apposition of fragments is obtained by anchoring the whole fragment, either by wiring or by dental braces anchored to a plaster skull cap.

Nature has wisely furnished an abundant blood supply to all of the nose and face. With the high degree of tissue immunity to infection also present, many discouraging cases often heal with surprisingly good results. It may be necessary to remove sequestra or to drain a few ethmoid cells at some later date, either externally or intranasally. However, this is usually a comparatively simple procedure and a good final result is obtained.

SPHENOID SINUS INJURIES

Due to its protected position, fracture of the sphenoid bone is fortunately rare except in the most severe injuries. It is more likely that the greater and lesser wings of the pterygoid processes will be involved in some transverse facial fractures and that the other problems presented in severe injury will overshadow the problem of the sphenoid.

Penetrating wounds such as those caused by sharp objects and bullets do occasionally involve the sinus itself, and it may be necessary to search for foreign bodies or to see that proper drainage is instituted. One must bear in mind the intimate relationship of the sphenoid and the posterior ethmoid sinuses to the optic nerve, for we have occasionally seen optic nerve atrophy follow injury to the head, which could be accounted for only by fracture in this region which was not recognized at the time.

MAXILLARY AND MALAR BONE INJURIES

These two bones are so intimately associated that fracture of one often extends into the other. In either case the maxillary sinus and orbit are usually involved.

The malar bone forms the most prominent part of the face and is, therefore, most frequently injured. Since it articulates with the maxilla, the frontal and the zygomatic process of the temporal bone, and with the sphenoid, its attachment is essentially weak, and dislocation easily takes place. By studying this bone's location and shape in the dry skull, we can visualize the result of blows from various angles.

The maxilla largely houses the maxillary sinus and also forms a prominent part of the face, so it is likewise subject to frequent fracture. This may take place from extraction of teeth, from direct blows of a crushing nature over the body, or from blows on the front of the face producing transverse facial fractures either through the alveolus, nose and bodies of the maxillae, or through the orbits. Blows on the nose often fracture the nasal processes of the maxillae; blows on the malar secondarily involve the maxilla.

Diagnosis rests largely on inspection and palpation, aided by a knowledge of anatomy and mechanics. X-ray studies are valuable here, and no attempt at reduction should be made until the films have been carefully studied.

In nearly all cases, we find that the sinus contains a blood clot. In simple cases with no deformity, it will frequently be absorbed in a few weeks, and it is unnecessary to wash the clot out unless infection takes place. In the more severe cases, we are in no hurry to irrigate the sinus, preferring to wait until nature has walled off all fracture lines before doing so. Usually four to six days are sufficient. Then we run no risk of introducing and spreading infection. In other cases that are infected, in which we wish to use an intranasal route to reduce dislocation, we are content with a large drainage opening in the inferior meatus for the time being and employ irrigation only after the four to six day interval.

Treatment, of course, depends on the type of injury. Generally it is a question of reversal of the fracturing force by whatever method happens to be best suited to the particular case and the prevention of deformity.

The orbital rim must be restored as well as the contour of the orbit. In certain cases it may be necessary to make an incision along the rim to restore contour, to remove blood clots from the orbit, or to drain an orbital abscess. In comminuted fractures of the anterior wall, where there is an external wound into the sinus, we may be able to work through this defect, removing clots and fragments, and utilizing all viable fragments in restoring contour, after which the external wound is carefully repaired and intranasal drainage instituted.

The reduction of dislocated malar bones and zygomatic processes is usually readily accomplished by working from within the sinus through the Caldwell-Luc approach. Oftentimes, to hold these bones in proper position, a balloon will be left within the sinus so that constant pressure can be exerted. After the balloon has served its purpose, it can be deflated and removed through the antrostomy opening.

The correction of transverse facial fractures is usually best accomplished by wiring the teeth, and by the application of various orthodontic appliances anchored to a plaster skull cap. At times we use pins driven through the maxillae and various fragments and again anchored to the outside by rubber bands and wires. In many cases, such as in high transverse facial fractures, it may be best to wire the fragments by direct approach. Wiring of the fragments gives firm anchorage and materially shortens convalescence.

Fractures through the alveolar border and hard palate and involving the teeth frequently accompany these severe injuries. The orthodontist and dentist should be called upon in these cases to correct the deformity and to restore function. Many ingenious devices have been employed to carry out the various mechanical problems encountered in these cases. The results, even in seemingly hopeless cases, are often much better than anticipated. This is the reward for the many hours of patient work and planning that have gone into the restoration of these deformities to their former appearances.

FRACTURES OF THE MANDIBLE

Mandible fractures occur more frequently than those of the maxilla. Displacement is usually quite marked, due to the line of fracture and to the muscular pull. The shape of the mandible, its mobility, its density of structure, the loose skin covering, and the buffering of the condylar cartilages, protect this bone from injury. The most frequent fractures occur at the angles laterally and through the mental foramina anteriorly.

The diagnosis is usually obvious, indicated by jaw displacement and facial deformity. Faulty occlusion and irregularity in alignment of the teeth as well as pain and grating of bone with attempted motion usually characterize mandible fractures. There may also be bleeding from the mouth. Gentle palpation of the mandible from condyle to symphysis will usually reveal fracture locations. The patient is reluctant to move the mandible and may drool saliva rather than swallow. X-rays are essential for detailed diagnosis.

Double fracture of the mandible is quite frequent and probably exceeds 30 per cent of all cases. Therefore, when a single fracture is detected, another fracture, generally on the other side, should be suspected. Fracture lines involving the teeth are to be considered compound even though no actual mucosal break is seen.

Mandibular fractures are handled by the oral surgeon, the maxillofacial surgeon, or the plastic surgeon. Dental consultation with regard to involved teeth in the fracture line or injured teeth is indicated. Frequently it is necessary to extract loosened or fractured teeth prior to reduction and immobilization. Reduction of the fractured mandible aims at pre-injury articulation of the teeth and restoration of normal mandibular contour.

REDUCTION AND FIXATION

Occasionally simple undisplaced fractures with undisturbed occlusion may be treated by a sling-type head-dressing (Barton's bandage). The purpose of this bandage is primarily to prevent gross motion. If there are teeth in both fragments and in the upper jaw, the usual method of treating mandibular fractures is by means of interdental wiring and then intermaxillary fixation with elastic bands.

The classification of fractures of the mandible given by Erich and Austin in their book *Traumatic Injuries of the Facial Bones—An Atlas of Treatment*[1] is based on the location of fracture lines. Their categories are as follows:

1. Single fractures of the mandible.
 a. Single fractures of the body of the mandible occurring somewhere in the region of the dental arch.
 b. Single fractures near or involving one angle of the mandible.
 c. Single fractures of the ramus or of the coronoid process, or of the neck (subcondylar fractures).
2. Bilateral fractures of the mandible in various locations.
3. Double fractures involving one side of the mandible.
4. Multiple fractures of the mandible.
5. Badly comminuted fractures of the mandible.
6. Fractures of the lower alveolar process.
7. Fractures of the dentulous mandible associated with an edentulous maxilla.
8. Ununited fractures of the mandible.

Treatment depends on the location of the fracture lines, the presence or absence of teeth, and their relationship to the fracture lines. The patient's own dentures frequently can be utilized in treatment. Generally it is indicated to use available teeth to maintain position of the fragments and immobility of the mandible. After reduction, immobilization is obtained by interdental wires, or arch bars and wires, and intermaxillary fixation by elastic bands. Where necessary, external fixation by pins or open reduction and fixation of fragments by direct wiring, may be employed. Traction apparatus may be indicated for severely displaced fragments.

Reduction of fragments and mandibular fixation should be completed as promptly as possible. Periods of waiting in excess of seven days will jeopardize results. Usually, solid union is present in four or five weeks, and the apparatus may be removed safely. The maintenance of desired position of the fragments can be determined only by frequent examinations and serial x-rays when indicated. Antibiotics should be given initially whenever there is possible compounding of the fracture and should be continued until all danger of infection has subsided.

Nonunion of mandibular fractures is not uncommon, and any fracture line failing to solidify in two months probably represents nonunion. Nonunion may complicate open wiring secondary to complicating infection. Simple nonunion with significant bone loss may be treated by curetting the ends and removing the fibrous tissue between the fragments, then refixation.

Mandibular fractures with loss of bone and some cases of nonunion, may require a bone graft and again fixation of graft and fragments plus immobilization.

Fractures of the lower or upper alveolar process may be manually reduced and position maintained by arch bars and wiring.

The most serious complications to mandibular fractures are: 1. nonunion and 2. osteomyelitis.

In spite of the physician's accomplishments in the care of the wounded, his main interest, as in all other major medical problems, is in the prevention of disease. To attain this goal I would like to present the following recommendations:

1. New laws to curb drivers who have been drinking.
2. Proper and uniform speed laws.
3. Minimum safety features in design and equipment as standard, not optional, features.
4. Referral medical clinics.
5. Three classes of driving permits for private, commercial, and passenger-carrying vehicles.
6. Driver education courses in all public, private, and parochial schools.
7. The consideration of a point or demerit system.
8. More state police and rescue squads.
9. Further engineering studies of highways and all related factors as well as of the machine itself.
10. More time and money spent on basic research.

The physician is proud of his definitive care of the injured but does not believe that his duty as a citizen and a physician has been fully discharged until preventive measures have become facts and are reflected in the daily automotive statistics. ★★★

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SLOW MAIL

A military historian has discovered this gem which may console anyone awaiting delayed official correspondence from Washington: The United States Army still has not replied to a letter from ex-Captain Ulysses S. Grant, written early in 1861, offering his services in the Civil War. (Grant got into the war because Illinois Governor Richard Yates finally commissioned him a colonel in the state's militia.)

Gastrointestinal Obstruction In the Newborn Infant

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Modern medical technology has brought about increasingly improved survival rates in newborn infants with gastrointestinal obstruction. In this paper the author discusses types of obstruction, diagnosis, and treatment.

GASTROINTESTINAL OBSTRUCTION in the newborn is one of the biggest challenges in pediatric surgery. Recent advances in the care of these infants have resulted in increasingly improved survival rates. Early diagnosis is of utmost importance in the successful outcome of these cases.

SYMPTOMS

The first clue to the presence of intestinal obstruction may be polyhydramnios noted at the time of delivery. When this condition is present, gastrointestinal obstruction should be suspected and the infant should be checked for it as early as possible. A careful physical examination of the newborn infant should reveal the presence of imperforate anus, strangulated inguinal hernia, or the greatly distended abdomen which may be present in some of the other obstructive anomalies. The infant who has excessive mucus resulting in drooling, coughing, or episodes of respiratory difficulty may have esophageal atresia and should be examined for the presence of this anomaly before feedings are attempted. If feedings are attempted and the patient is unable to swallow or gags on his feedings, this condition should be immediately suspected.

Vomiting is the next sign to develop. Many infants will regurgitate small amounts in the first day or two of life, especially when feedings are attempted; however, the normal infant does not vomit bile. Green bile-stained vomitus should be considered a sign of intestinal obstruction until proven otherwise.

TYPES OF OBSTRUCTION

The types of obstruction which must be considered in the differential diagnosis in a baby who is vomiting green material or showing abdominal distention are: intestinal atresia or stenosis, annular pancreas, malrotation with volvulus, meconium ileus, Hirschsprung's disease, and the meconium plug syndrome. Atresia and stenosis of the bowel occurs most often in the duodenum and in the lower ileum. Duodenal atresia and stenosis is commonly associated with mongolism.

CLINICAL PICTURES

Annular pancreas and duodenal stenosis present a similar clinical picture and may present essentially the same findings at surgery. Malrotation of the midgut may produce intestinal obstruction due to peritoneal bands blocking the duodenum. Intestinal obstruction may also be caused by volvulus of the midgut which may result in complete gangrene of this portion of the bowel as well as intestinal obstruction.

Meconium ileus occurs in patients who have so-called fibrocystic disease of the pancreas or mucoviscidosis. In these patients the meconium is abnormally digested due to the absence of pancreatic enzymes. A tenacious material results which produces complete intestinal blockage. After the intestinal obstruction is relieved, these patients must always take pancreatic enzymes to supplement their diet and are subject to development of severe chronic respiratory infections which usually lead to an early death.

Hirschsprung's disease will usually produce a transient intestinal obstruction in the newborn

period which may be overcome spontaneously or by enemas with the later development of typical chronic constipation. In an occasional infant this newborn phase of the obstruction will be so severe as to amount to complete intestinal obstruction requiring surgical relief.

The meconium plug syndrome must be carefully differentiated from the other conditions because it can be readily relieved without surgery leaving the patient entirely normal. The adherent plug of mucus and meconium filling the rectum can usually be dislodged by enemas but sometimes this is a bit difficult and the patient may be subjected to unnecessary surgical exploration if the diagnostic possibility is not checked out.

DIFFERENTIAL DIAGNOSIS

Differential diagnosis of these lesions is primarily by x-ray. The upright abdominal x-ray is of most help in the differential diagnosis. Duodenal atresia will show an air bubble in the stomach and another in the dilated duodenum giving the characteristic "double bubble" sign. If the obstruction is incomplete as in duodenal stenosis or annular pancreas, there may be small, scattered air bubbles in the small bowel in addition to the "double bubble" sign. Atresias further down in the GI tract will give varied numbers of loops of dilated bowel with fluid levels.

If one sees in the intestinal pattern a mottled density suggesting soap bubbles, the diagnosis of meconium ileus is highly probable. If the entire abdomen is filled with dilated loops of bowel, it is not possible in the newborn infant to differentiate the large bowel from the small bowel. Therefore, in these instances it is necessary to perform a barium enema to rule out obstruction in the lower colon and rectum.

If the obstruction is complete and is proximal to the cecum, the barium enema will show a very tiny, almost string-like colon sometimes known as microcolon. This is a completely normal colon, the small size of which is simply due to proximal obstruction. Once the obstruction is overcome, the small colon will rapidly enlarge to the normal size. The barium enema in Hirschsprung's disease in the infant is not likely to show the typical narrow distal segment with great dilatation proximal to this, but it will demonstrate the fact that the colon is dilated as well as the small bowel so that efforts can be made to relieve the obstruction by enemas and rectal tube from below prior to attempting surgical relief.

If the meconium plug syndrome is the cause of the obstruction, the barium enema may reveal this obstructing mass and will quite frequently result in its expulsion. The barium enema in the patient with malrotation of the midgut will show the cecum in abnormal position, either high in the right upper quadrant or in some other location than its usual right lower quadrant position.

TREATMENT

Atresia and stenosis of the duodenum and annular pancreas are best treated by a side-to-side duodenojejunostomy. We prefer to avoid gastrojejunostomy because of the likelihood of marginal ulceration. Atresias farther down in the small bowel are treated by end-to-end anastomoses. Side-to-side anastomoses are not done because of the likelihood of the development of the blind loop syndrome due to enlargement of the ends of the anastomosed segments of bowel which may occur with subsequent growth of the patient. If the patient is very ill and the obstruction is in the lower half of the small bowel, it is frequently life saving to do a Mikulicz double-barrelled ileostomy rather than a primary anastomosis. This permits very early return of bowel function without having to wait for a tiny anastomosis to open.

The treatment of meconium ileus may vary according to the length of the obstructed segment. When the obstructed segment of bowel is rather short, it is possible to open the bowel and wash out the inspissated meconium with 1½ per cent hydrogen peroxide solution. When the obstructing material has been removed, the opening in the intestine may be closed with the expectation of a good result. In those cases in which the obstructed segment is very long or in which the patient is quite ill, the length of time required for removal of the obstructing material and the trauma of this technique may be unwise. Therefore, an ileostomy, either of the simple loop or of the Mikulicz variety may be performed proximal to the obstruction. This permits rapid return of intestinal function. The obstructing material can be irrigated from the distal bowel in the postoperative period, and the ileostomy closed subsequently.

Hirschsprung's disease in the newborn period should not be treated by the Swenson's abdominoperineal pull-through technique because of the high rate of complications and the poor result. Instead, a simple colostomy should be done and resection of the abnormal bowel deferred until the child is about two years of age.

Malrotation of the midgut is treated by the Ladd procedure. The volvulus is untwisted in a

counterclockwise direction and the peritoneal bands which cross the duodenum and connect the right colon to the right side of the peritoneum are divided. The entire colon is placed in the left side of the abdomen and the duodenum is freed so that it passes down in the right side of the abdomen. This returns the malrotated bowel to the nonrotated position which usually prevents further symptoms.

The meconium plug syndrome should be diagnosed before the child is taken to surgery. With good fortune, simple enemas or perhaps the barium enema will dislodge the meconium plug causing it to be passed spontaneously. Because of the possibility of this lesion in patients with intestinal obstruction, a part of the physical examination in any infant suspected of an intestinal obstruction should be a simple saline enema which may be readily given by the examining physician.

PERTINENT FACTORS

There are several factors which will increase the survival rate in patients with the various anomalies under discussion. The first, as already mentioned, is early diagnosis and prompt treatment. The second, is the avoidance of overhydration. There may be a tendency to give fluid by clysis and intravenous routes to a baby who is unable to take feedings by mouth. Infants who require correction of these abnormalities do very poorly when they are overhydrated. They require little fluid in the absence of excessive losses in the first two to three days. Subcutaneous clyses are poorly absorbed in these babies who already have a lot of extracellular fluid. Therefore, they are not recommended. Such fluids that are necessary should be administered by the intravenous route. In the premature infant, this amount should probably not exceed 20 cc., per pound per day in excess of measured loss by vomiting and in the full-term infant no more than 40 to 45 cc., per pound per day in excess of measured abnormal losses.

Respiratory complications are one of the greatest hazards in these infants. Gastric suction is very important for the prevention of vomiting and aspiration which so frequently cause these respiratory complications. However, the nasogastric tube may interfere with the clearing of the secretions from the pharynx and may promote reflux of gastric contents into the pharynx increasing the hazard of respiratory complications. Because of this, we routinely use a gastrostomy placed in the stomach at the time of surgery in infants operated on for intestinal obstruction. This gastrostomy permits excellent decompression of the stomach yet keeps the nasopharynx free for breathing. The frequent use of this little operation has been one of the major advances in the care of these infants. ★★★

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THE MEANEST MEDIAN

Use of the word "average," says a biostatistician, can be as confusing as it is useless. "For example," he points out, "if an individual stands with one foot on a hot stove and the other in a freezer, we might say that, on the average, he is comfortable."

The Chronic Disease Era

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Recent years have seen the passing of the defeatist attitude which regarded progressive disability as an inevitable by-product of chronic diseases and viewed such ailments as both incurable and irremediable. This progress is due in great measure to the utilization of primary preventive measures and secondary preventive and restorative techniques to prevent, delay, or minimize the crippling effects of chronic diseases. It is not farfetched to look to the day when further research advances will make primary prevention of the degenerative diseases a complete reality. Under this premise the author discusses the public health physician's role in the chronic disease era.

THE INCREASING PREVALENCE of long-term illness and concomitant disability has become a problem of paramount importance in the nation today. The population explosion we are experiencing in the United States means that there are increasing numbers of persons to be served by the health and medical professions. But of even greater significance is the marked alteration in the age composition of our population, showing a sharp increase in the number of older persons.

Currently there are over 16 million Americans who are 65 and older. A dramatic index of the sharp rise in the number of our senior citizens is the fact that this represents a 236 per cent increase over the number of older persons in our population just 40 years ago.

To illustrate the steady rise in life expectance at birth, let's take a look at my family tree. In the year my mother was born, life expectancy at birth was 47 years. Some 25 years later I arrived on the scene, and in that relatively short period of time, life expectancy for the newborn child had increased to 54 years. Since then in less than twice that time span the increase has more than doubled—with an additional 16 years tacked on the life expectancy at birth. Today we have almost reached the Biblical three-score-and-ten.

As members of the medical profession, we can take justifiable pride in this dramatic increase in life expectancy. High among the responsible factors are the notable advances in medical care that have taken place in recent years, and even more, our great success in the primary prevention of infectious diseases. Public health application of medical research triumphs have drastically reduced, and in some cases eliminated, the great toll that these diseases used to take of infants and children.

As is true of many social and industrial advances, our public health successes have insidiously created the newer problems of the chronically ill. It now appears that for the privilege of living longer, we have to pay in the coin of the degenerative diseases. Those prevented from dying of typhoid fever, smallpox, pneumonia, and other infectious diseases with high mortality are now living on with sequelae and impairments and perhaps with increased susceptibility to cardiovascular disease, cancer, diabetes, or other chronic diseases with high incidence among the aged. Little wonder that health authorities describe our times as the chronic disease era!

The findings of the National Health Survey conducted by the Public Health Service indicate that at least 77 per cent of persons 65 and older have one or more chronic conditions. This does not mean that the total number are ill or disabled, but more than six million older people who are

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not in institutions report some limitation of their usual activities as a result of chronic conditions. About two million in that group are invalids in the commonly accepted sense of that term, that is, they are in chronic ill health and disabled, unable to carry out usual activities of daily activity.

A recent study of hospitalized patients in Michigan underscores the greater impact of long-term disability among the elderly. Six of the most frequent diagnoses quite clearly set off the aged from the under-65 hospital population in this study. Rates for diseases of the circulatory system, diseases of the nervous and sensory organs and diabetes were three times as great among the aged as the rest of the hospitalized patients. The rate for malignant neoplasms among the aged was four times greater than the rate for the under-65 patients. The rate for acute myocardial infarctions was more than five times the rate among younger inpatients. The rate for fracture of the neck of the femur was more than 18 times greater among the aged than among the under-65 hospital patients.

RECENT ADVANCES

All of these facts on illness and disability point in one direction—action. The responsibility of the public health physician is obvious. He must apply all existing tools and work as vigorously as he did to meet the challenge of communicable diseases. The tools are the same for the prevention and control of disability due to chronic illness: promotion of health, specific protection against disease, early diagnosis and treatment of the acute processes, functional management of disease, and application of restorative services. Each level of prevention, however, is not to be regarded as a separate entity, but rather as a point of intervention on a broad continuum of care. Although the tools are the same, their use may not be.

Many advances are being made in specific measures which can be taken in the primary prevention of chronic diseases. Although limited in number, some breakthroughs are already observable. Fluoridation of the water supply achieves primary prevention of dental caries. There can be primary prevention of accidental injury through community effort; safety devices such as seat belts in automobiles can substantially reduce or prevent injury or death resulting from automobile accidents. The progress made in the United States is heartening, Mississippi is no exception. The onset of rheumatic heart disease can be prevented by prophylactic care of a child who has or who has had rheumatic fever. Further research will, of course, be required before final answers to the primary prevention of the full range of chronic diseases become available, but there are already these measures to be taken.

PROMPT DETECTION

Realistically we must face up to the fact that primary prevention is effective in a very limited number of chronic disease categories. Thus, when chronic illness occurs, the public health officer knows that our strongest preventive weapon is prompt detection, ideally in the preclinical stage, with appropriate treatment given at a time when the disease is most amenable to treatment.

Since chronic conditions often have an insidious onset, a disease may already have progressed significantly before symptoms of pain and discomfort bring the patient to medical attention. The National Health Survey revealed that over a third of the elderly have not seen a physician for two years or more. Community programs to screen for hidden disease are an obvious essential in developing plans for dealing with the problems of the chronic illness and aging. In addition, the private physician's role in periodic health appraisals and "well-oldster" clinics is vital in finding diseases early.

WHAT TO SCREEN FOR

What should we screen for? It is estimated that there are almost a million and a half cases of undetected diabetes in this country at the present time. Since undetected diabetes is a progressive disease, early diagnosis and treatment are important to prevent disabling complications, and an effective screening tool is available to us.

Perhaps one-seventh of all serious eye disease in adults is caused by glaucoma, but it is estimated that roughly 1,200,000 undetected cases of glaucoma exist today in the United States, although a simple screening test can reveal the possible presence of the disease.

Use of the Papanicolaou smear to detect cancer of the cervix would prevent countless deaths. In fact, it is predicted that if all cervical cancers could be discovered in this way before they become invasive, cancer of this site would be 100 per cent curable. Yet more than 10,000 women die each year of cancer of the cervix.

If, despite our best efforts chronic illness does develop clinically, everything must be done to con-

trol the degenerative process and to maintain the level of health without disability or further deterioration.

IMMOBILIZATION

It is indeed ironic that much of the disability we see today among the chronically ill and aged might have been avoided if prompt, aggressive, suitable medical and nursing care had been applied. Many of the complications of chronic illness arise not from the disease itself but from the fact that the patient has been immobilized following the onset of the disease.

We have done a complete about-face with respect to our ideas on immobilization, particularly in therapy for chronic illness which is usually associated with protracted confinement in bed. Formerly attention was focused only on the treatment of the disease. However, what once was considered a therapeutic measure—bedrest—has boomeranged. Perhaps we should more often order the rocking chair. Immobilization has led to atrophy of muscles, contractures, stiffness and soreness of joints, incontinence, bedsores, and metabolic as well as psychologic changes. It follows that mobilization of the individual can prevent such complications.

The Public Health Services has developed two booklets, "Strike Back at Stroke" and "Strike Back at Arthritis," planned to give the patient and his family a means of mobilizing the patient wherever he may be, whether in his own home or in a hospital, nursing home, or other institution. To be prescribed by the family physician, these booklets outline such things as bed positioning, passive and active exercises, and ambulation techniques. Presently a third brochure entitled "Step Into Action" is being developed for the amputee.

In short, our greatest challenge today is prevention of disability in the chronically ill. But where disability has occurred, restorative services should be available in all settings—the home, the nursing home, or the hospital. The aim in treatment should always be the achievement of maximum independence for each individual, that he may learn to live within the limits of his disability, but to the hilt of his capability. This new dimension of care, only recently considered to be within the realm of public health responsibility, also relates to the prevention of dependency. In the broader framework dependency concerns far more than economic status with which it is commonly identified. It takes account of the patient as an individual and covers physical, social, and emotional dependency as well. It has become all too clear that dependency in one category can lead to dependency in other spheres, and that conversely, attainment of a degree of independency in any one category can positively effect the other aspects of dependency. For the older, chronically ill person, restoration seldom means the regaining of the ability to be fully employed. But even a partial return to independent living, to self-care, can mean a triumph in new self-respect, in enhanced human dignity.

THREE-PRONGED ATTACK

A three-pronged attack which makes use of these tools is necessary to resolve the problems of long-term illness and disability. Researchers are working to learn about the basic causation, seeking to identify the etiological factors of chronic diseases and to develop preventive and therapeutic measures which can be utilized. This is an exciting area, including knowledge of cell structure and the basic process of cell aging.

Meanwhile, however, we cannot afford to delay action. We must move to the second area of attack which is through physicians, the general practitioners as well as the many specialists directly concerned, who are serving increasing numbers and proportions of long-term patients. And the third area of attack on chronic illness is the responsibility of the public health officer, i.e., to stimulate the organization of community resources to provide the medical profession with essential services and personnel. These last two areas are closely related. The effectiveness of the physician is often dependent on the availability of supportive services, and community health resources for the chronically ill are of little value if they are not utilized by the local physician.

COMPREHENSIVE CARE

As a result, today's medicine points up the need for comprehensive care, including those many services needed to supplement and support physician care. This is in sharp contrast to the practice of medicine a few decades ago, the direct and close physician-patient relationship with little or no involvement of other medical or ancillary personnel. Today's medicine is multi-faceted and complex, and to meet the many and complicated needs of long-term patients, the physician can no longer serve as a self-sufficient entity. Further there can be no artificial separation of the practice of medi-

cine and the practice of public health. Here the practicing physician joins hands with the public health physician.

The doctor's dilemma may well be described as the need to integrate the physician's services with the many paramedical services and community resources required in the treatment of the chronically ill.

The kinds of specialists and technicians employed in comprehensive health services have increased until there are now four professional health workers for every physician. These additional workers provide the nursing care, the laboratory and pharmacy services, and many of the special treatments such as physical therapy which the physician requires in the management of his patients. The physician is responsible for making the diagnosis and providing the treatment, but an army of professional and technical personnel is needed to carry out his instructions. The responsibility of the health officer to promote, develop, and coordinate these services in a unified manner is obvious. He is the catalyst, so to speak.

MODERN PHYSICIAN'S ROLE

But we have much to consider in the expanding role of the modern day physician. For the care and treatment of long-term illness, just as for the treatment of acute illness, the physician has turned to the hospital to avail himself of the newest diagnostic tools and therapeutic measures. It is recognized that provision of treatment for the patient with multiple problems requires a variety of abilities and approaches which are conveniently concentrated in the hospital setting. Here the physician can draw on the services of nurses, social workers, laboratory technicians, physical speech and occupational therapists, and dietitians as natural adjuncts to his everyday practice of medicine. The opportunity to have several patients centrally located is also a matter of convenience to the physician.

The public, too, has come to accept the hospital as the ideal place to receive treatment when illness occurs.

In the light of the promotion of this "institutional image" it has been somewhat difficult to reverse existing attitudes of the medical profession and the public and promote a return to the home for many of the treatment phases of ill persons.

A change of attitude is vital for we have learned from the scientific, social, cultural, economic, and medical points of view that when intensive hospital care is unnecessary, it is better to keep the patient out of the hospital and in his home among friends and family for as long as is possible.

APPLIED KNOWLEDGE

But knowledge cannot serve to benefit mankind until it is applied. And application in this instance has been all too limited. Through research studies we know that from 20 to 30 per cent of the patients in general hospitals who have been hospitalized for 30 days or longer are there for social rather than medical reasons. They remain hospitalized because: (1) No appropriate facilities or resources exist in the community for their care; (2) No home is available to them; or (3) There is no one in the home to take care of them. We also know, as a result of surveys of nursing homes, that a sizable proportion of patients in these institutions could be adequately cared for in a noninstitutional environment if some type of nursing care could be given outside of the nursing home setting.

On the other side of the coin is the fact that studies of community needs indicate that of the total number of aged who are chronically ill, from 70 to 75 per cent are already being cared for in their own homes, but that for the most part the health services they receive are either inadequate or lacking entirely. According to data obtained by the National Health Survey, only one-half of those persons homebound because of chronic illness received any kind of nursing care in the study year, even when the term "nursing care" was broadly defined to include care given by the family. Moreover, only one-quarter of those in their own homes with major limitations of activities because of long-term illness received any kind of appropriate care, whether part-time or constant, and only 13 per cent of those who could not get around without some help received nursing care.

Just as the problem is complex, so is the solution equally complicated. There is no one answer, and responsibility for resolving the situation rests on many shoulders. However, no one questions the fact that the lead must be taken by the health and medical professions, practicing physicians as well as health officers.

The physician of today must become oriented to the changing population pattern and the corresponding changes in medical needs. In a real sense, he must also be a perpetual student in order to keep up with the constant advances in medical technology. The modern physician must become

acclimated to the team approach, working with others in the health and social welfare fields. And he must also learn to work with the members of related disciplines not only in the familiar and convenient hospital environment, but in a variety of settings including the home and the nursing home.

COMMUNITY COORDINATION

How well the physician can function on a team depends to a large extent on the services and facilities available within the community. And the great challenge that all communities face is how to get the variety of services needed and how to coordinate them so that everyone can be assured an opportunity to get whatever health services he needs at the time and at the place where such services will be of maximum value.

Many needs are readily apparent. For example, the need to expand visiting nurse service is now generally recognized. With the growing number of chronically ill and aged in our population, our goal must be not only to expand home nursing services in communities that have them, but also to establish such programs in communities where such services are not available.

The value of homemaker service has also been demonstrated. The availability of a homemaker, trained to work in the homes of the ill, often determines whether a patient can be cared for at home or must be hospitalized.

The practicality of coordinating the many services for the chronically ill person in the home has been demonstrated in some communities, particularly through the extension of hospital programs. A number of hospitals as well as other community agencies have coordinated home care programs in which a health team, captained by a physician, appraises each patient's needs and works out a regime of treatment that is tailor-made to his needs.

Another illustration of modernized health programs are the central information referral, and counseling services. These help the patient, his family and professional persons locate the various health resources that can be of assistance to them. It is not easy for the individual or even for his physician to know about the various services available from voluntary agencies, nursing homes, rehabilitation centers, and visiting nurse and homemaker programs. The referral center meets this need. Another important function of the center is to point up gaps and overlapping services and facilities in the total community health program.

FEDERAL SUPPORT

The purpose of the Community Health Services and Facilities Act, which was passed by Congress last fall, is directed toward such a community approach. Special emphasis is placed on development of services that will prevent disability and permit the physical restoration of older people both in their own homes and in nursing homes and related facilities.

The legislation raises from $30 million to $50 million the amount which Congress is authorized to appropriate for formula grants to state health departments. These additional chronic disease monies are for matching grants; the state must put up 50 cents for each Federal dollar it receives. Their purpose is to help states and their communities establish and expand programs that are principally directed toward chronic disease and aging. Under this authority, Congress appropriated an additional $6 million for the year ending June 30, 1962. In his 1963 budget request, the President asked for $13 million.

In recognition of the need for more nursing homes, Congress in this new law raised from $10 million to $20 million the amount to be appropriated annually in Federal aid for the construction of public and other nonprofit nursing homes. For the current year, a total of $18.5 million has been appropriated for nursing home construction.

In addition to these efforts to speed already developing trends, the law authorizes a new approach. This is accomplished through the provision for project grants which is geared at helping communities find still better ways of tackling today's health problems. Congress appropriated $3 million for the year ending June 30, 1962, for such grants, and it is expected that this amount will be doubled in the next fiscal year.

Under other authority, the Public Health Service also makes grants for research of various types, including research related to prevention of the occurrence and the treatment of chronic ill and grants for the training of professional personnel.

The increased Federal support currently available for programs at the grass roots level can do much to help get programs under way in communities throughout Mississippi. But effective medical leadership can make all the difference. Health officers and practicing physicians can alert the community to its needs, help establish priorities, and attract community-wide support which is an

absolute essential for success. As in all other states, the people of Mississippi have much to gain through the creation of vitally needed health services.

Undoubtedly, many new patterns for health care will emerge from this accelerated experience. As we progress, new problems will arise. This is to be expected, as in the application of any scientific measure to benefit the public. First the painstaking research in the laboratory to obtain the knowledge of the theory involved and then equally painstaking research in how to apply this knowledge in the larger laboratory—the community. In this as in all research, the approach is through trial and error.

The public health field is experiencing the dawning of a new era in public health. The wholehearted cooperation of all public health workers can help to raise the art of prevention to an unprecedented height. ★★★

330 Independence

SOONER SIDELINED

In the great era of Bud Wilkinson's always-winning teams, enthusiasm for football ran high on Oklahoma University's campus. On the Saturday morning of a home game, a young freshman was admitted to the hospital with a diagnosis of acute appendicitis.

As a nurse prepared him for surgery, she expressed sympathy at his having to miss the game.

"Oh, I won't miss it altogether," was his cheery reply, "the doctor has arranged for me to have a spinal anesthetic so I can listen to the broadcast during the operation."

Radiologic Seminar XI: Myositis Ossificans

FRED J. HAMERNIK, M.D.
Vicksburg, Mississippi

MYOSITIS OSSIFICANS, as the name implies, indicates the presence of bony deposits within muscle tissue. Three main forms of this entity have been described.

1. Myositis ossificans progressiva, a hereditary disease characterized by progressive ossification of voluntary muscles and other connective tissue elements. The process starts before birth or in early childhood and is usually quiescent by the age of 25 years. The trunk and larger extremity muscles are those chiefly involved in the process.

2. Myositis ossificans circumscripta, a localized process which is frequently occupational in nature and secondary to repeated minor trauma to specific areas. The so-called "rider's bone" in the abductor muscles of the thigh and the "dancer's bone" in the soleus are examples of this entity.

3. Myositis ossificans traumatica, the most common type, in which the muscular ossification develops secondary to a single acute traumatic episode and is localized to the area of trauma. It is usually a consequence of significant intramuscular hematoma formation and is found most frequently in the thigh. The elbow and shoulder areas are the next most common sites of involvement.

Two to four weeks following the trauma one may first detect some fine amorphous soft tissue calcification on radiographs of the involved area, and after four to six weeks the osseous pattern becomes apparent. It may take many months, however, for the ossification process to become complete. During the active phases of the process the radiologic appearance and even the microscopic pattern may at times simulate the patterns found in certain malignancies, and this differential must be kept in mind. Coley[1] states that this is one condition in which the x-ray is more dependable than the microscopic section.

The following case report is an example of myositis ossificans traumatica.

A 16-year-old high school football player was injured one week previous to the development of a hard tender mass in the right thigh. A radiographic study (Figure 1) was done at that time

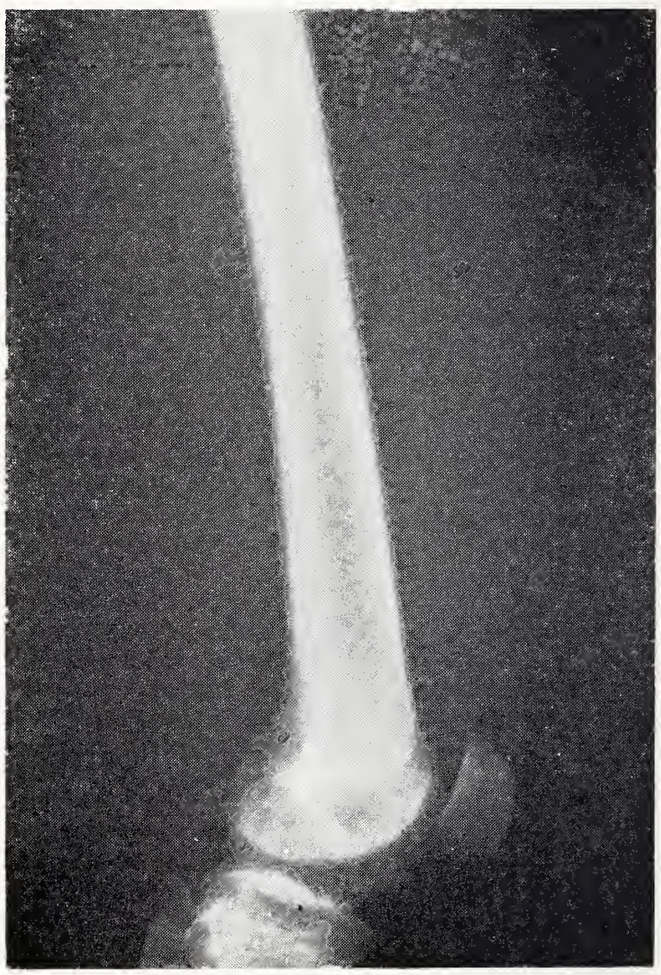


Figure 1.

Sponsored by the Mississippi Radiological Society.
From the Department of Roentgenology, Vicksburg Hospital.

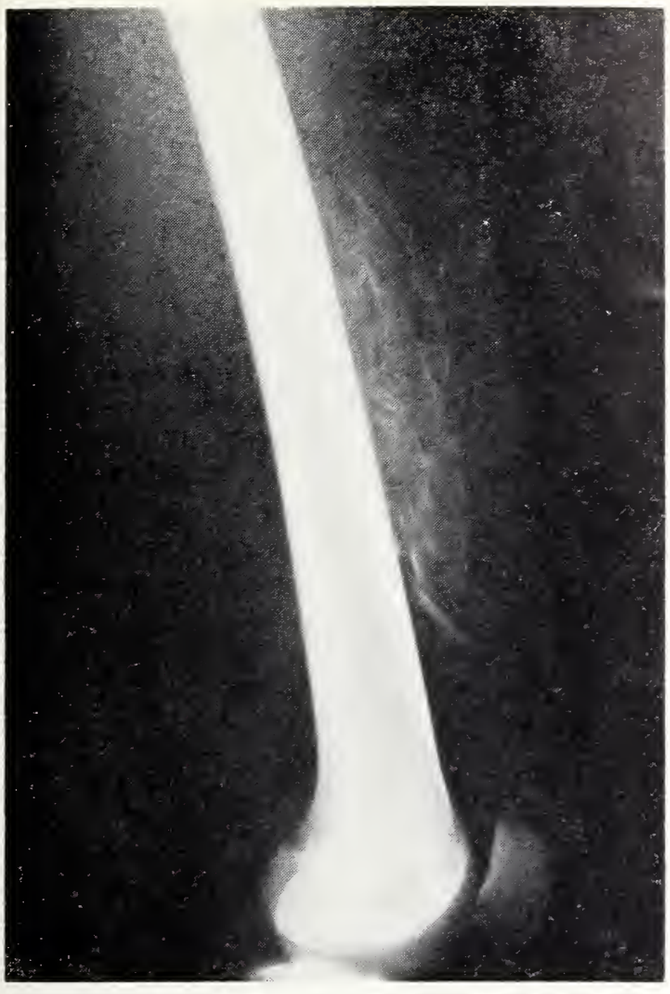


Figure 2.

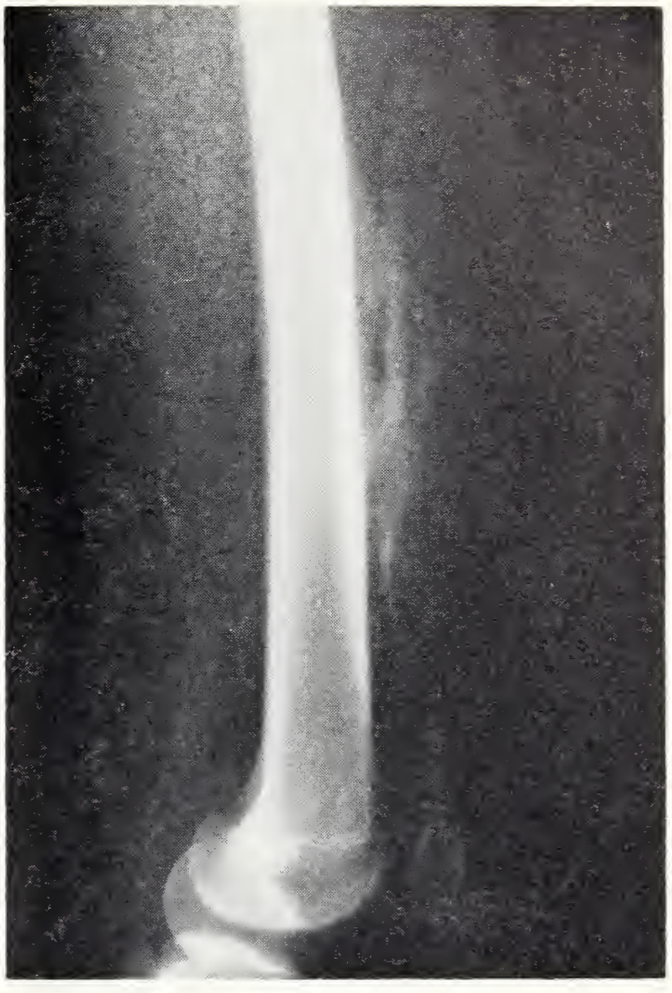


Figure 3.

and showed no evidence of pathology. A film obtained 25 days later (Figure 2) demonstrated extensive calcification in the anterior thigh muscles and some periosteal reaction. Three months after the injury, a film (Figure 3) showed regression and no periosteal or bony involvement. No subsequent studies are available, but the young man is on active military duty in Germany and has no residual muscle stiffness or enlargement. ★★★

1600 Monroe Street

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2. Hodges, P. C.: Phemester, D. B.; and Brunschwig, Alexander: Diseases of Bones and Joints, New York, Thomas Nelson and Sons, 1938.
3. Dahlin, David C., and Kelly, Patrick J.: Management and Mismanagement of Osseous Lesions, Am. J. Orthopedics 3:142 (May) 1961.
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UNCLE SAM'S SKYWAY

Senator John Williams (R. of Delaware) has done some calculating and come up with the following method of illustrating the size of the Federal Government's new spending budget: The dollar bills involved would make a yard-wide carpet long enough to go to the moon and back and orbit the earth five times with enough left over to build a superhighway between Washington and Hyannis Port.

—Insider's Newsletter

Clinicopathological Conference XXXVIII

Conducted by the Department of Pathology
Mississippi Baptist Hospital
Jackson, Mississippi

This month's CPC concerns a 47-year-old white male who was admitted to the Mississippi Baptist Hospital because of shortness of breath and marked weakness. He had been previously hospitalized about a year before because of severe episodes of headache and faintness which were attributed to subarachnoid hemorrhage. He also had a history of hypertension.

Discussers are Dr. David J. Van Landingham and Dr. T. E. Wilson, Jr. The autopsy report is given by Dr. Louis Schiesari.

A 47-YEAR-OLD WHITE MALE was admitted to the Mississippi Baptist Hospital on July 12, 1962, because of shortness of breath on exertion. About two weeks prior to entry he began noting progressive shortness of breath on slight exertion such as walking across the room. He had been feeling extremely weak and had been getting weaker. He had had about two episodes of transient heaviness under the midsternal area, but these were not accompanied by increased sweating or radiation.

The patient had been previously hospitalized in April 1961 because of severe episodes of headache and fainting, which were attributed to a subarachnoid hemorrhage. A bilateral arteriogram showed normal filling without any evidence of aneurysm. He recovered completely and got along well until the onset of the present illness. About one month prior to the April admission he was found to have hypertension for which he received treatment.

Physical examination at the time of the 1962 admission revealed a well-developed, well-nourished, chronically ill white male with a gray hue to the face. Temperature was 97.6, respiration 18, and pulse 90. The blood pressure was 110/98 (left arm), 110/88 (right arm), with a 10 mm. pulsus paradoxus. Examination of the skin, lymph nodes, head, eyes, ears, nose, eyegrounds, neck, thorax, abdomen, and extremities revealed no abnormalities. Examination of the heart revealed no gross enlargement. The rhythm was regular, but rapid, and the sounds were of a slapping type. No murmurs, shocks, or friction rubs were heard. All peripheral arteries were palpable and pulsatile.

The urinalysis was negative. Examination of the blood showed a hemoglobin of 15 gm.; hematocrit, 46 volume per cent; sedimentation rate 40 mm/hr; white blood cells 9,500 with 5 monocytes, 8 lymphocytes, 86 segmented neutrophils, and 1 band.

X-ray examination of the chest showed the heart to be within the upper limits of normal with some hilar vascular congestion. An electrocardiogram done on the day of admission showed a marked coving and inversion of the T-waves in V-1 and V-4 with some inversion of the T-waves in AVF.

The day following admission the blood pressure dropped to 80/60. After Vasoxyl (2 cc. in distilled water) was given intravenously, the blood pressure reading was 100/70. Auscultation of the chest revealed scattered moist rales over the lower halves of each lung field. The patient was restless but did not complain of pain. It was thought that the patient was in congestive failure, and Mercuhydrin and Cedilanid intravenously were added to the vasopressor. On the third hospital day it was stated that the shock could not be adequately controlled. The pulse became weak with a rate of 96 per minute and the heart sounds were distant. Solu-Cortef was added in a desperate attempt to

control hypotension. No anticoagulant drugs were administered. All therapeutic measures were to no avail, and the patient expired 44 hours after admission.

PATIENT'S HISTORY

Dr. David J. Van Landingham: "Referring to the protocol, we note that the patient suffered progressive shortness of breath and marked weakness for the two weeks prior to admission. I believe we shall find that both of these symptoms are significant. In this same period he had about two episodes of transient heaviness under the midsternal area, but these were not accompanied by an increased sweating or radiation.

"According to the history, the patient was in the hospital in April 1961 because of severe episodes of headache and fainting, which were attributed to a subarachnoid hemorrhage. The protocol states that bilateral arteriograms showed normal filling without any evidence of aneurysm. This portion of the protocol is puzzling because we don't know whether the patient was simply admitted with the diagnosis of subarachnoid hemorrhage or whether this was the final diagnosis. I assume from these normal arteriograms that the diagnosis of subarachnoid hemorrhage was reputed or not proved.

"Assuming that the patient was not suffering from subarachnoid hemorrhage, there are two other possibilities that should be considered. About a month before the April admission the patient was found to have hypertension for which he received treatment. Perhaps this was hypertensive encephalopathy. Aortic valvular disease can also cause fainting, but, of course, this anomaly would not be associated with hypertension. Aortic stenosis, for example, would account for his marked weakness and might account for his shortness of breath. However, later data show that he does not have the cardiac silhouette suggestive of aortic stenosis.

"Physical examination at the time of the July 1962 admission revealed a well-developed, well-nourished, chronically ill white male with a gray hue to his face. The gray hue, of course, would exclude cyanosis and many diseases involving congenital defects and interference with pulmonary circulation.

"The temperature was 97.6, respiration 18, pulse 90. This pulse rate is a little rapid. Blood pressure was 110/98 in the left arm and 110/88 in the right arm with a 10 mm. pulsus paradoxus. He had very low pulse pressure in both arms. This finding is again consistent with aortic stenosis or some obstruction to the subclavian vessels. Pulsus paradoxus is usually not considered pathological until it gets above 10 mm., but since it is included in the protocol, I think we must consider it significant. The most probable cause of pulsus paradoxus is pericardial effusion. However, this patient's heart was neither bottle-shaped nor enlarged as is usually the case in pericardial effusion. It was not widened in its transverse diameter, and it did not have the obliteration of the angles of the lower borders of the heart that would indicate fluid. Consequently, it is a little hard to buy pericardial effusion as the cause.

"In addition to pericardial effusion there are a number of other causes of pulsus paradoxus including collapse of peripheral circulation, obstruction to respiration, and adhesive pericarditis.

"Examination of the skin, lymph nodes, head, eyes, ears, nose, eye grounds, neck, thorax, abdomen, and extremities revealed no abnormalities. Examination of the heart revealed no gross enlargement. The rhythm was regular, but rapid. The sounds were described as a 'slapping' type. I'm not quite sure of the meaning of this description. There were no murmurs, shocks, or friction rubs. However, you can have valvular disease without murmurs. I have had one patient with aortic stenosis in which there was no discernible murmur, yet he died following a syncope and collapse. We attributed it to aortic stenosis. The fact that there was no friction rub would tend to rule out to some extent a pericarditis or an infarct. The discovery that all peripheral arteries were palpable and pulsatile would rule out a dissecting aneurysm or obstruction to the major vessels of the thorax.

LABORATORY DATA

"The urinalysis was negative. Examination of the blood showed a hemoglobin of 15 gm.; hematocrit, 46 volume per cent; sedimentation rate 40 mm/hr, which is elevated. The white count was 9,500 with 5 monocytes, 8 lymphocytes, 86 segmented neutrophils, and 1 band. This is a shift to the left, but with a normal count I can't attribute much significance to it. The sedimentation rate was increased, but certainly he had no anemia unless he was extremely dehydrated. Dehydration is not mentioned in the protocol, but I think we can assume that he is not in shock or collapse because of blood loss.

"X-ray examination of the chest showed the heart to be within the upper limits of normal with some hilar vascular congestion. An electrocardiogram done on the day of admission showed a marked coving and inversion of the T-waves in V-1 through V-4 with some inversion of the T-

waves in AVF. There were also flat T-waves in V-5 and V-6. I mention this simply because it rules out hyperkalemia to some extent. However, I have seen patients with high serum potassium whose electrocardiograms showed flat T-waves. There were inversions of the T-waves with coving of the S-T segment in the right precordial leads. There were some depressions of the S-T segment in lead 1 and V-5 and V-6 which were compatible with a posterior myocardial infarct. I bring this up because this cardiogram with the picture of a posterior myocardial infarct and a right ventricular strain pattern is highly suggestive of pulmonary infarct.

"The day following admission the blood pressure dropped to 80/60. After the intravenous administration of Vasoxyl in 2 cc. of distilled water, the blood pressure reading was 100/70. This was very little response. Auscultation of the chest revealed scattered moist rales over the lower halves of each lung field. The patient was restless but did not complain of pain. He was thought to be in congestive failure. Mercuhydrin and Cedilanid, given intravenously, were added to the vasopressor.

"It was stated that on the third hospital day the shock could not be adequately controlled. The pulse became weak with a rate of 96 per minute, and the heart sounds were distant. Solu-Cortef was added in a desperate attempt to control hypotension. No anticoagulant drugs were administered. All therapeutic measures were to no avail, and the patient expired 44 hours after admission.

POSSIBLE SOLUTIONS

"We have already discussed the pulsus paradoxus and the conditions it indicates. I shall run quickly through other diagnoses that might be considered in view of this patient's symptoms. Internal hemorrhage has been suggested, but there is no supporting evidence since he had no anemia and there is no mention of any blood loss. Pulmonary pneumonia could account for the shortness of breath and the weakness, but there is no history of fever and no x-ray evidence of consolidation.

"Emphysema might be suspected because of the patient's age, but there was no cyanosis and no x-ray evidence to support this diagnosis. Collapse of the lungs is ruled out by x-ray data. There is no indication of asthma in his history, and the duration of the symptoms was too short to support this conclusion. There is no x-ray evidence of bronchiectasis, but this condition is not always diagnosed by plain film. However, he had no cough, no history of sputum, no hemoptysis, no fluid in the chest, and the duration of his difficulty was not prolonged enough to suggest bronchiectasis. I think pulmonary infarction is a good possibility and will discuss this later at length.

CARDIAC ANOMALIES

"There are some cardiac anomalies that need to be considered. I think congenital lesions are out due to his age. In addition, he had no murmurs, no cyanosis, and the contour of his heart was normal. Valvular lesions would seem to be ruled out because he did not have a history of rheumatic fever. However, a severe valvular lesion can exist without murmurs. An aortic stenosis, in particular, can cause encroachment upon coronary ostia, and involvement of the posterior coronary ostia, in turn, might give this type of an EKG pattern. However, there is no mention of diminution of the aortic second sound. In addition, the heart is not enlarged. For the diagnosis of aortic stenosis to be made, he should have had left ventricular enlargement and the picture of a left ventricular strain rather than right.

"The protocol shows a history of hypertension, but we have nothing to document it in the admission data. The heart was not enlarged, the eye grounds were normal, and the urinalysis report did not reflect hypertension of long standing. I think his blood pressure and pulse rule out thyrotoxicosis. In addition, his heart was not enlarged. Nutritional heart diseases are ruled out because his heart was not enlarged. All the nutritional heart diseases I've seen have been associated with considerable edema.

"Arteriosclerotic heart disease should be considered as a possibility although his symptoms do not present the classical picture of infarction. This patient had right ventricular strain and a posterior infarction pattern which suggests something in the pulmonary system. However, an anteroseptal infarct can occur with the findings predominantly on the right side. However, you would expect the patient to have edema as well as dyspnea. No mention is made here of edema.

"Constrictive pericarditis may be ruled out because he has no edema. Tamponade due to pericardial effusion has been mentioned, but I do not think it is a likely diagnosis. An aneurysm, I think, is out because of the normal contour of the heart, the absence of pain, and the absence of a murmur. A dissecting aneurysm should give severe pain and some differences in pulses which are not present

in this case. Interference with the pulmonary venous filling or return flow would have caused pulmonary edema and cyanosis which were not present.

"I must come back to pulmonary artery involvement with embolism, probably multiple emboli, as a good possibility. I would like to know whether or not there was tenderness in his leg and the laboratory findings on SGOT and LDH. Although this condition can be present without x-ray evidence if the emboli are small, we do have a number of contraindications to this diagnosis. The pleural fluid and effusion that are usually present in pulmonary infarction were not present. The classical symptoms of pain, cough, and hemoptysis were not present. However, his restlessness, collapse, failure to respond, ashen color without cyanosis, extreme weakness, and dull pain certainly are consistent with multiple pulmonary small infarctions or embolic phenomena.

CIRCULATORY COLLAPSE

"I also think that peripheral circulatory collapse due to some moderately acute, adrenocortical insufficiency is a good possibility. Weakness and fatigue are present 100 per cent of the time in adrenocortical insufficiency. The history shows that he had about two episodes of fainting or syncope which can occur in the hypoglycemic phase of adrenocortical insufficiency. As a matter of fact, it does occur in about 54 per cent of the cases. However, nausea and vomiting, which are present in about 86 per cent of the cases of adrenocortical insufficiency, are not mentioned in this patient's protocol. On the other hand, his hypotension, small heart, irritability, and nervousness are compatible with adrenocortical insufficiency. He should, however, have had a high potassium content reflected by tall T-waves which are not present on the electrocardiogram. However, it is possible for a patient to have an increased serum potassium without its being reflected in the T-waves. I do think that adrenocortical insufficiency is a good possibility and must be considered simply because he responded so poorly to the vasopressors. This factor indicates that his difficulty was primarily a hormonal deficiency rather than nerve embarrassment or insult.

PRINCIPAL DIAGNOSES

"My principal diagnoses, then, are adrenocortical insufficiency and multiple pulmonary embolism. There is also the possibility of arteriosclerotic coronary disease with involvement of the posterior coronary or right coronary giving an anteroseptal infarct."

SUMMARY

Dr. T. E. Wilson, Jr.: "In summary, we have a 47-year-old white male of unknown occupation, with asthenia, retrosternal discomfort, headache, fainting, and a history of subarachnoid hemorrhage, and transitory hypertension. On examination he exhibited cyanotic facies or pallor, vascular congestion of the hilar zones of the lungs, marked coving and inversion of T in the right EKG chest leads, hypotension, and pulsus paradoxus. The patient was afebrile but had an increased response as evidenced by segmented leukocytes with a shift to the left and an increased sedimentation rate. He died in terminal shock, 44 hours after admission to the hospital.

"These findings indicate involvement of the cardiovascular system, without the presence of uncomplicated congestive failure. The asthenia and vague chest pain are seen in chronic myocarditis and in pericarditis. One might speak of the anginal syndrome in this case, but the absence of exertion, eating, emotion, and recumbency as provocative factors rules out angina pectoris but not myocardial infarction. This diagnosis, however, is not established. However, hemopericardium from cardiac rupture caused by infarction-induced myomalacia would explain all of his symptoms, including the pulsus paradoxus.

"Aortic stenosis must certainly be considered because of fainting in a middle-aged man and because it is a frequently overlooked cardiac lesion. However, there is no evidence of complicated or uncomplicated valvular disease.

"I am unable to employ the 'slapping' type of murmur as an aid to diagnosis in this problem. One must always consider pulmonary embolism and infarction as well as terminal gram-negative bacteremia in people presenting this picture. However, it and subacute bacterial endocarditis practically always exhibit more evidence of toxemia.

"Finally, one must consider hypersensitivity reactions resulting from allergens, antigens, and medications as well as extracardial diseases which finally affect the myocardium. However, there is nothing in the history mentioning contacts, congestion, exposures, or tests suggesting suspicions of any of these.

"I believe the one diagnosis that will fit all of the data included in this recital will be myocardial infarction with rupture of the ventricle and hemopericardium."

CPC / Baptist Hospital

Dr. Louis Schiesari: "On autopsy, the heart was found to weigh 550 gm. The myocardium and the coronary arteries were negative. Microscopic examination of random sections of the myocardium revealed patchy, lymphocytic infiltration of the interstitial tissue with a mixture of monocytes and polymorphonuclear leukocytes. There was conspicuous interstitial edema and the muscle fibers showed a variable degree of degenerative alterations from cloudy swelling to loss of cross striations and dissolution. The lungs showed congestion of the alveolar capillaries, moderate edema, and no evidence of inflammation.

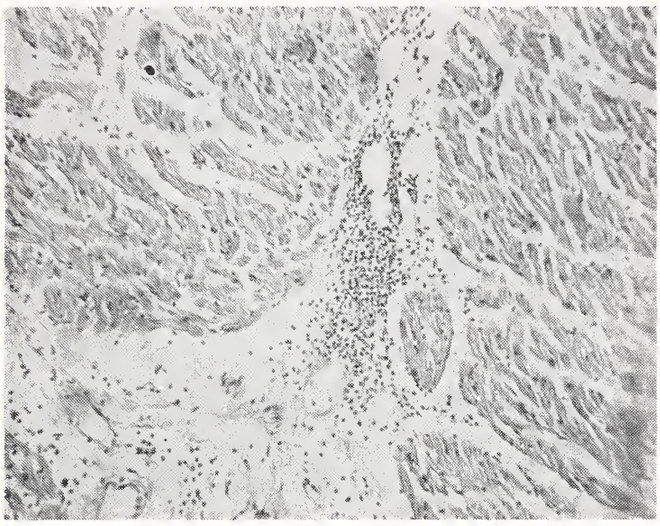


Figure 1. Interstitial infiltration with a heavy mixture of polymorphonuclear leukocytes.

"With the inflammatory reaction limited to the myocardium and with no causative agent demonstrable, we think that in this case we are dealing with an acute isolated myocarditis, also called idiopathic or Fiedler myocarditis." ★★★



Figure 2. Moderate, diffuse interstitial infiltration chiefly of lymphocytes, with conspicuous edema and degenerative changes of muscle fibers.

1190 North State Street

QUACK MEET

During the first National Congress on Medical Quackery sponsored by AMA at Washington, a newly arrived guest in the headquarters hotel, in the capital on other business, peeked into the main meeting room as a plenary session was breaking up.

"Holy smoke," he exclaimed in astonishment, "I knew there were quacks but I never thought they held national conventions!"

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Meeting, June 16-20, 1963, Atlantic City, N. J. F. J. L. Blasingame, executive vice president, 535 N. Dearborn, Chicago 10, Ill.

American Academy of General Practice, April 1-4, 1963, Chicago, Ill. Mr. Mac F. Cahal, Executive Director, Volker Blvd., at Brookside, Kansas City 12, Mo.

International College of Surgeons, North and Central American and Caribbean Federation, 28th Annual Congress, April 21-25, 1963. W. F. James, executive director, 1516 Lakeshore Drive, Chicago 10, Ill.

Southern Medical Association, Nov. 18-21, 1963, New Orleans, La. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham 5, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 13-16, 1963, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Amite-Wilkinson Counties Medical Society, First Tuesday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday Monthly, 6:30 p.m., Robert E. Lee Hotel, Jackson. Jim G. Hendrick, 800 Carlisle St., Jackson, Secretary.

Claiborne County Medical Society. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday March and November, 2:00 p.m., Clarksdale. Whitman B. Johnson, Jr., 422 McWilliams Building, Clarksdale, Secretary.

Coast Counties Medical Society. Charles N. Floyd, 1619-23rd Ave., Gulfport, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. Robert M. Graham, 612 Dixie Towers, Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March and September. Robert B. Townes, Jr., 1196 Mound St., Grenada, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. Thomas W. Wesson, 420 Magazine, Tupelo, Secretary.

North Mississippi Medical Society, First Thursday January, April, and October, Oxford. Marcus E. Morrison, 512 Van Buren Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucien Olen Crosby Memorial Hospital, Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. James C. Bass, Jr., 424-13th Ave., Laurel, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Tom H. Mitchell, The Street Clinic, Vicksburg, Secretary.



The President Speaking

'Monarchs and Medicine'

C. P. CRENSHAW, M.D.
Collins, Mississippi

THE KENNEDY ADMINISTRATION has a profound commitment to compulsory federal medical care for the aged under Social Security. In fact, the President entered office with this commitment high on his New Frontier agenda of legislative musts. So far, he has been unable to deliver, even with a substantial majority of liberals in the Senate and party control of the House.

The medical care-consuming public and physicians who provide these services will feel increasing pressure from the White House. The full power of the American presidency will be applied to the fulfillment of this campaign promise to the AFL-CIO and this power—growing daily—will be a force with which to reckon.

Just recently, Lord Hailsham, the British Conservative leader, said during a visit to the United States that "your system of government is an elective monarchy with a king who rules with a splendid court and even, it is rumored on my side of the Atlantic, a royal family, but does not reign. Ours in Britain is a republic with an hereditary life president who, being a queen, reigns but does not rule."

John F. Kennedy holds more power than any English king has known since 1066 and any high school student will tell you that we had grievances aplenty against one George III less than two centuries ago. What our founding fathers said in the Declaration of Independence about George applies about as well to Jack: "He has erected a multitude of new offices and sent hither swarms of officers to harass our people and eat out their substance."

History also reminds us that King George had a way of putting his relatives on the public payroll with easy jobs in the colonies. Bobby is the attorney general, Teddy is a senator, brother-in-law Sargeant Shriver is potentate of the Peace Corps, and brother-in-law Steve Smith is on the party payroll.

Nobody advocates tossing the lot into the Boston harbor, but medicine already sees the whites of their eyes. The tyranny of socialized medicine cannot and must not prevail. ★★★

JOURNAL OF THE
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EDITORIALS

The Flood of Federal Funds: Medical Nemesis or Science Savior?

I

THE IMPACT OF FEDERAL FUNDS upon medical education, research, and care sources in the United States is astonishingly profound. Moreover, the statutory vehicles for conveyence of federal medical grants are immersed in a murky complex of departments, bureaus, and institutes. The circumstances under which government monies are expended vary so widely as to suggest almost total dissimilarity in purpose. Nobody seems to possess a yardstick with which a valid measurement may be made but the aspect of vastness is immediately apparent to the most casual observer.

The 87th Congress appropriated $5 billion in 90 categories for federal medical-health expenditures during the 1962-63 fiscal year, an increase of half a billion dollars over 1961-62. At best, however, this is only part of the picture because many appropriations acts do not earmark money, leaving the medical-related federal agency free to devise its own bookkeeping system, to prescribe the circumstances under which the money must be used, and to select the recipient as well as the expenditure project.

Such unlikely agencies as the Departments of Commerce, Interior, Justice, and State may make federal medical expenditures. Hunks of money go to the U. S. Escapee Program, administered through the foreign aid agencies for medical care at the periphery of Soviet bloc nations to eastern extremes of Hong Kong and Macau. The United Nations gets in the act for UNICEF and WHO. Uncle Sam operates the Coco Solo hospital in Panama, runs a medical school and two hospitals in the District of Columbia, pays 70 per cent of the bill for doctoring a million Palestine refugees in Jordan, Lebanon, Syria, and Gaza, and purchases U. S.-owned local currencies for other overseas medical expenditures under the Agricultural Trade Development and Assistance Act.

But these odd federal medical activities are peanuts beside the more easily understood programs of the U. S. Public Health Service, National Institutes of Health, the Department of Health, Education, and Welfare, and the Veterans Administration. The present medical pocketbook for these four agencies alone is over $3.6 billion. Not included are disability payments made under medical criteria by HEW's Social Security Administration and VA totaling up to $5.5 billion annually.

Whether all or part of these huge expenditures are wasteful or valuable, needless or necessary, foolish or prudent from a viewpoint of medical policy is a matter for decision by houses of delegates at state and national levels. The busy clinician, dedicated medical teacher, and serious investigator ought, however, to have the full facts.

II

American medical schools receive and use enormous sums of federal monies. Of all total expend-

itures by U. S. medical schools in 1960-61, about 40 per cent was provided by federal sources, $175 million out of a gross of $433 million. These funds are in three categories: research grants (27.4 per cent), training grants (9.8 per cent), and overhead or program administrative costs (4.3 per cent). The annual mean proration is $1.9 million per approved medical school or about two-fifths of the mean annual $5.1 million total operating cost.

The Council on Medical Education and Hospitals of the American Medical Association sees only an escalation in use of federal funds by the schools: "It is estimated that expenditures by medical schools from federal funds for 1961-62 will prove to have exceeded $215 million and will exceed $270 million during 1962-63."

Federal training grants were begun in 1947 for the purpose of improving teaching in cancer. Now their purposes are so broadly defined that the grants are actually aiding in the support of the schools' basic educational programs. From a modest beginning of about $3 million, training grants may hit $70 million in 1963, of which 88 per cent is from federal funds.

A serious consideration invariably accompanies a federal medical dollar: It must be used under conditions acceptable to the grantor and it may influence development of one scientific area over others. Says AMA in this connection: "In recent years, it has not been unusual for agencies to invite proposals for (research) projects in specific areas. This practice has resulted, in part, from large governmental appropriations intended to assist in the development of specific areas. Under these circumstances, institutional growth is almost certain to be uneven and unbalanced."

If imbalance and forced emphasis in medical education are symptoms, then AMA's conclusion is the diagnosis: "The extent to which sponsored programs may be promoting desirable changes in the emphasis on various disciplines and the extent to which they may be causing undesirable imbalance is debatable. For better or for worse, these changes are related to the pattern of financial support of medical education.

"No responsible school," the statement continues, "would knowingly request and no responsible agency (would) grant funds for purposes antagonistic to good medical education. Nevertheless, these moneys are intended by the grantors to influence training and do so by supporting some programs in preference to others. They are allocated preferentially to areas and disciplines which are believed by the grantor to be in need of encouragement."

III

The impact of federal medical funds on private practice is pronounced. In just 25 years, six of the 14 titles under the Social Security laws have come to involve federal expenditures in the billions based solely on medical determination, usually by the private practitioner. These include care for Old Age Assistance recipients, disability payments under OASDI, medical aspects of Aid to Dependent Children, grants for Maternal and Child Welfare, Aid to the Blind, and Aid to the Permanently and Totally Disabled. Still others are the federally-sponsored Vocational Rehabilitation, Crippled Children's Service, and hometown care for veterans.

Hill-Burton hospitals dot the medical landscape in every state and territory. Diagnostic and preventive care facilities are built largely through federal grants. Even the mortgage on a privately constructed nursing home may now be guaranteed by the government. The individual state of health of airmen, merchant seamen, Indians on reservation, astronauts, foreign service personnel, and Philippine veterans is within the purview of the federal medical checkbook.

Uncle Sam is one of the biggest purchasers of voluntary health insurance, too. Federal employees, various welfare recipients, and other categories of individuals have part or all of their premiums paid from federal funds. There's even an appropriation with which to pay for care of "repatriated mentally ill American nationals" in St. Elizabeth's Hospital at Washington.

IV

Medicine finds itself in an interestingly unique, if not indeed paradoxical, position when government reaches for its wallet. Representatives of AMA recently testified in support of H.R. 12, the Health Professions Educational Act, a federal funding vehicle for medical school construction, scholarships and related teaching grants, and expansion of research facilities. On the other hand, some proposed federal medical expenditures are vigorously opposed.

Physicians generally are not enamored with the prospect of all-out federal aid to education but the states and private sources come up short in support of medical education in its present day pattern. Even the student cannot hope to pay the

bill for his already high tuition fees account for only 6.4 per cent of school income.

Federal dollars may thus be mixed blessings in the complex picture of health service in the United States. It would be difficult to deny that problems exist or that dangers are inherent in the basic concept. Many are seriously concerned over the clearly defined acceleration of federal money into the health service economy. Obviously, there's no easy answer and political and philosophical aspects cloud the matter as much as the varied mechanisms for the outpouring of tax funds through federal sources.—R.B.K.

REFERENCES

1. Federal Medical-Health Appropriations for 1963. Chicago, American Medical Association, 1963.
2. Money and Medical Schools, Council on Medical Education and Hospitals, Chicago, American Medical Association, 1963.
3. Compilation of the Social Security Laws, 87th Congress, 2nd Session, House of Representatives, Document No. 616, Washington, U. S. Government Printing Office, 1963.

Progress of Voluntarism — in Blue

At the 94th Annual Session last year, the House of Delegates expressed gratification over gains and improvements achieved in voluntary prepayment coverage by the Mississippi Hospital and Medical Service, the state's Blue Cross-Blue Shield plan. The tote board for 1962 for the Mississippi Blues is impressive and the economic impact of the plan in the health service field is plainly substantial.

More than 190,000 claims were paid to the tune of $15 million, over 88 per cent of all Blue Cross-Blue Shield income. In paying most or all of the cost of just under a half a million days of hospital care, Blue Cross would have filled 1,250 hospital beds for the entire year. Four hundred thousand Mississippians, including 40,000 over age 65, own this coverage.

New and imaginative indemnity contracts are pushing medical, surgical, and hospital benefits upward with higher limit fee series and even authorization for care in the physician's office and out-patient diagnostic services.

In a preface to his annual report, Richard C. Williams, the plan's executive director, stated that "Blue Cross-Blue Shield stands today as convincing evidence of the ability and determination of individuals to evolve a pattern of protection to serve their needs through voluntary effort, coordinated action, and pooled resources."

Together with others in the field of voluntary financing for medical care, the Mississippi Hospital and Medical Service is a constructive force for helping citizens of the state meet the personal responsibility of providing for themselves.—R.B.K.

The Post Moves Ahead With Great Vigah!

Comes now the *Saturday Evening Post* from its pinnacle of pomposity with the solution to all the nation's problems, sage advice to the 88th Congress, and support for the New Frontier with a fervor difficult to describe. An editorial in the January 5, 1963, issue, "The 88th Congress Answers the Bell," gets underway with a reference to "rural hidebound conservatives" and concludes with an admonition that "the Congress should divest itself of such anachronistic devices as the filibuster and the iniquitous seniority rule."

Pontificating on various issues before the Congress, the *Post* favors enactment of King-Anderson-type legislation for compulsory federal medical care of the aged under Social Security, federal aid to education, and continuation of foreign aid which, the editor opines, "is a vital part of our policy and not a boondoggle."

Most Mississippi physicians remember the *Post's* editorial, "The Doctors and the AMA," published February 3, 1962, a prize package of misinformation and errors of fact.

All of which proves two points: the *Post* is consistent and its subscriber at 1600 Pennsylvania Ave., Washington, will hasten to renew his subscription.—R.B.K.

Herman Hilleboe: A Doctor's Doctor

A mighty figure and powerful professional personality has stepped down from the American medical scene. Dr. Herman E. Hilleboe, New York's widely known state health officer, resigned on Jan. 2 after serving under three governors. His name has become legend in the annals of preventive medicine, and the department he built in the Empire State is regarded as one of the best.

Dr. Hilleboe forged remarkable achievements in public health administration and organization of full-time county health departments. He has

been a leading figure in rehabilitation, care of the aging, and a relentless fighter against communicable disease. His exercise of imagination in environmental health, medical civil defense, and research in preventive medicine won him acclaim.

And no less impressive are this medical leader's achievements in the protection of the public health. Cultists have no more formidable adversary than Dr. Hilleboe, as witness that fact that New York is one of four states which does not license chiropractors. And between annual bouts with cultists, he found time to wrest x-ray equipment from nonmedical and nondental hands, carrying his case through the courts.

But the greatest accolade came from his own colleagues as recounted in an official statement from the New York executive department: "A continuing thread of his leadership in health matters has been a close partnership with those in private medical practice. Dr. Hilleboe has made it a regular practice to consult with members of the state medical society on any proposed program of the department. This united front in health matters has paid rich dividends in physician cooperation."

The Medical Society of the State of New York asked Dr. Hilleboe to serve as a special adviser to its Board of Trustees. He has been a member of the House of Delegates.

These endorsements by physicians in private practice alone validate his leadership in medicine. No greater tribute is possible than that of one physician to another.—R.B.K.

DEATHS

CHRISTIAN, ROBERT HAROLD, Baldwyn. M.D., University of Tennessee College of Medicine, Memphis, 1930; interned Shreveport Charity Hospital, La., one year; residency, V. A. Hospital, Asheville, N. C., one year; died Jan. 5, 1963, aged 54.

CONNER, JOSEPH CLIFTON, Columbia. M.D., University of Tennessee College of Medicine, Memphis, 1912; interned Baptist Memorial Hospital, Memphis, Tenn., one year; received Golden "T" Certificate from the University of Tennessee College of Medicine for 50 years of medical service; died Jan. 15, 1963, aged 83.

WHITE, JOHN PERRY, Picayune. M.D., Tulane University School of Medicine, New Orleans, La., 1909; died Jan. 7, 1963, aged 82.

State Morbidity Reported Through Feb. 1

The Mississippi State Board of Health reports the following occurrence of morbidity for 1963 through the fifth week of the year, ending Feb. 1, 1963. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	28
Tuberculosis, O.F.	1
Salmonella infections	5
Dysentery, Bacillary	2
Septicemia, Staph.	3
Meningococcus infection	
Meningitis	3
Meningitis, O.F.	2
Mononucleosis, infectious	6
Hepatitis, infectious	92
Helminthic infections	
Hookworm	127
Ascariasis	19
Streptococcus infections	
Scarlet fever	69
Strep throat	347
Pertussis	7
Measles	26
Chickenpox	78
Mumps	93
Influenza	103
Gonorrhea	453
Syphilis	
Late	14
Early	14

Senior Citizens Publish King-Anderson Treatise

United Senior Citizens, Inc., a group of senior citizens opposing the passage of the King-Anderson bill, has recently published a 34-page booklet on the so-called "Medicare" bills.

Entitled "Stop, Thief!," the booklet contains a discussion of the bills and the possible economic consequences of their enactment.

The author of "Stop, Thief!" is Norman Lombard, LL.B., who is a business consultant now semi-retired and residing in Fort Lauderdale, Fla. He was a member of the bar in Missouri and California, where he engaged in mortgage and investment banking and in executive and managerial work, and later in business consulting.

"Stop, Thief!" may be secured from United Senior Citizens, Inc., 570 Fifth Avenue, New York 36, N. Y.

Book Reviews

Treatment of Injuries to Athletes. By Don H. O'Donoghue, M.D., Professor of Orthopedic Surgery, University of Oklahoma Medical School, Oklahoma City. 649 pages with illustrations. Philadelphia: W. B. Saunders Company, 1962. $18.50.

The author, who is professor of orthopedic surgery, University of Oklahoma Medical School, has made a great contribution to our knowledge of athletic injuries. He is best known for his classic articles on knee injuries. However, for many years he has lectured and held clinics and conferences on the subject. This book should be well received and is probably the best on the subject. It also contains a great deal of basic orthopedics and could qualify as an orthopedic text.

The book begins with a general discussion of athletic injuries, the role of the physician, and the prevention of injuries. Emphasis is placed upon the conditioning of the athlete and upon good equipment. Most of the book is written regarding specific injuries to extremities. There is, however, a chapter dealing with craniocerebral injuries and facial injuries. To make the book complete there is a chapter regarding chest and abdominal injuries that are frequently sustained by the athlete.

This book fills the basic needs for the physician treating athletic injuries. The author combines a wealth of knowledge of sports and orthopedics and presents it in a simple style. It is recommended for all physicians who are interested in athletic injuries.

W. C. Warner, M.D.

Books Received

Journal MSMA has received the following books for review. Selections will be made for more extensive reviews in the interest of the readers and as space permits. Further information on the books listed will be furnished on request. Physicians are urged to submit reviews of additional books which, in their opinion, merit comment.

Surgical Practice of the Lahey Clinic. By Members of the Staff of the Lahey Clinic, Boston, Mass. 872 pages with 628 illustrations. Philadelphia: W. B. Saunders Company, 1962. $17.00.

Synopsis of Roentgen Signs. By Isadore Meschan, M.D., professor and director of the Department of Radiology, Bowman Gray School of Medicine, Wake Forest College, Winston-Salem, N. C., with the assistance of R. M. F. Farrer-Meschan, M.D., research associate, Department of Radiology, Winston-Salem School of Medicine, Wake Forest College, Winston-Salem, N. C. 436 pages with 1488 illustrations. Philadelphia: W. B. Saunders Company, 1962. $11.00.

Surgery of the Chest. Edited by John H. Gibbon, Jr., M.D., Samuel D. Gross professor of surgery and chairman of the Department of Surgery, Jefferson Medical College, with the collaboration of 35 authorities. 902 pages with illustrations. Philadelphia: W. B. Saunders Company, 1962. $27.00.

Fundamental Skills in Surgery. By Thomas F. Nealon, Jr., M.D., associate professor of surgery, Jefferson Medical College. Illustrated by Ellen Cole. 289 pages. Philadelphia: W. B. Saunders Company, 1962. $8.50.

Gynecology and Obstetrics. By John William Huffman, M.D., professor of obstetrics and gynecology, Northwestern University Medical School. 1190 pages with illustrations. Philadelphia: W. B. Saunders Company, 1962. $28.00.

Physical Diagnosis. By Ralph H. Major, M.D., professor of medicine and of the history of medicine, the University of Kansas, and Mahlon H. Delp, M.D., professor of medicine, The University of Kansas. Sixth edition. 355 pages with illustrations. Philadelphia: W. B. Saunders Company, 1962. $7.50.

Office Procedures. By Paul Williamson, M.D. Second edition. 448 pages with new illustrations by Ann Williamson. Philadelphia: W. B. Saunders Company, 1962. $13.50.

Electrocardiography: Fundamentals and Clinical Application. By Louis Wolff, M.D., visiting physician, consultant in cardiology and head of the Cardiographic Laboratories, Beth Israel Hospital; Clinical Professor of Medicine, Harvard Medical School. Third edition. 351 pages with illustrations. Philadelphia: W. B. Saunders Company, 1962. $8.50.

Gastroenterology. By Henry L. Bockus, M.D., emeritus professor of medicine, University of Pennsylvania Graduate School of Medicine. Sec-

ond edition. 958 pages with illustrations. Philadelphia: W. B. Saunders Company, 1963. $25.00.

Medical Laboratory Technology. By Matthews J. Lynch, M.D., *et al.* 735 pages with illustrations. Philadelphia: W. B. Saunders Company, 1963. $12.00.

Peripheral Vascular Diseases. By Edgar V. Allen, M.D., Section of Medicine, Mayo Clinic; Nelson W. Barker, M.D., professor of medicine, Mayo Foundation, Graduate School, University of Minnesota; and Edgar A. Hines, Jr., M.D., Section of Medicine, Mayo Clinic. Third edition. 1044 pages with 367 illustrations. Philadelphia: W. B. Saunders Company, 1962. $18.00.

Todd-Sanford Clinical Diagnosis by Laboratory Methods. Edited by Israel Davidsohn, M.D., chairman, Department of Pathology, the Chicago Medical School, and Benjamin B. Wells, M.D., dean, California College of Medicine, Los Angeles. Thirteenth edition. 1020 pages with illustrations. Philadelphia: W. B. Saunders Company, 1962. $16.50.

Textbook of Pathology. By Stanley L. Robbins, M.D., professor of pathology, Boston University School of Medicine. Second edition. 1190 pages with illustrations. Philadelphia: W. B. Saunders Company, 1962. $19.00.

PERSONALS

CURTIS P. ARTZ of Jackson participated on a panel and discussed "The Handling of Burned Patients in Mass Casualties" at the Jan. 20-23 sectional meeting of the American College of Surgeons held in Phoenix, Ariz.

OTIS H. BECK of Greenville was featured in the Jan. 31 issue of the *Delta Democrat-Times*. The 66-year-old physician retired in January after 36 years active practice in Greenville. Dr. Beck was associated with the Hirsh, Beck, and Farr clinic.

JACK K. GOODRICH of Jackson presented a paper at the Southern Radiological Conference in Point Clear, Ala.

JULIUS L. LEVY, JR., of Clarksdale has been certified as a diplomate of the American Board of Surgery. Dr. Levy received his medical degree from Tulane University School of Medicine in 1957 and interned at Charity Hospital in New Orleans. He completed four years as a general surgery resident on the Tulane Service at Charity Hospital. Dr. Levy is associated in practice with his father, JULIUS L. LEVY, SR.

O. P. STONE has been elected chief of staff of the Tippah County Hospital. RALPH D. FORD was named assistant chief of staff and R. C. MCGLAMERY was elected secretary. All are from Ripley.

W. W. WALLEY of Waynesboro has been named president of the Wayne County Chamber of Commerce.

NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

FANT, WILLIAM MILTON, Jackson. Born Indianola, Miss., Sept. 24, 1927; M.D., University of Mississippi School of Medicine, Jackson, 1958; interned University of Mississippi School of Medicine, Jackson, one year; radiology residency, University of Mississippi School of Medicine, Jackson, three years; member, Mississippi Radiological Society; elected Jan. 10, 1963, by Central Medical Society.

MCMANUS, SAMUEL PRESCOTT, Gloster. Born Gulfport, Miss., March 16, 1933; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned Lloyd Noland Hospital, Fairfield, Ala., one year; captain, U. S. Army, two years; elected Dec. 4, 1962, by Amite-Wilkinson Counties Medical Society.

PITTMAN, KENNETH PRESTON, Jackson. Born Washington, D. C., Feb. 27, 1933; M.D., Tulane University School of Medicine, New Orleans, La., 1958; interned Charity Hospital of Louisiana, New Orleans, one year; residency, University of Pittsburgh, Penn., three years; elected Jan. 10, 1963, by Central Medical Society.

WADSWORTH, HENRY MANLEY, JR., Hernando. Born Memphis, Tenn., April 18, 1938; M.D., University of Tennessee College of Medicine, Memphis, 1961; interned John Gaston Hospital, Memphis, Tenn., one year; elected Aug. 2, 1962, by DeSoto County Medical Society.

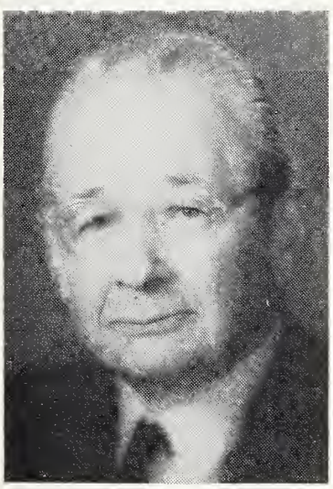
MSMA Plans Seminar on Medicine and Religion As Scientific Summit of 95th Annual Session

Another pace-setting annual session first is scheduled for May 15 when a Seminar on Medicine and Religion, with four nationally known clergymen and a physician church leader, will be presented to Mississippi physicians. The special program will highlight the scientific assembly's formal work at the 95th Annual Session, Biloxi, May 13-16, according to a joint announcement by Drs. C. P. Crenshaw, association president, and C. G. Sutherland, chairman of the Council on Scientific Assembly.



Bishop Brunini

"The success of the 1962 Symposium on Space Medicine encouraged the council to seek another special program of national importance," Dr. Sutherland said. "The growing awareness of relations between theology and medicine made the seminar both logical and appropriate."



Dr. Feibelman

Dr. Crenshaw said that "as president of the association, I am highly gratified that this uniquely original and timely seminar has been organized and our officers and trustees are understandably proud of having secured the services of five forceful personalities in this area of interest."

Appearing before the Wednesday morning seminar will be:

- The Most Rev. Joseph B. Brunini, Auxiliary Bishop, Diocese of Jackson-Natchez (Roman Catholic), Jackson
- Dr. Julian B. Feibelman, Rabbi, Temple Sinai (Jewish), New Orleans
- Rev. Dr. Paul B. McCleave, Director, Department of Medicine and Religion, American Medical Association, Chicago
- Rev. Robert P. Varley, Rector, Salisbury Parish (Episcopal), Salisbury, Md.
- Milford O. Rouse, M.D., Chairman, Committee on Medicine and Religion, American Medical Association, Dallas



Rev. Dr. McCleave

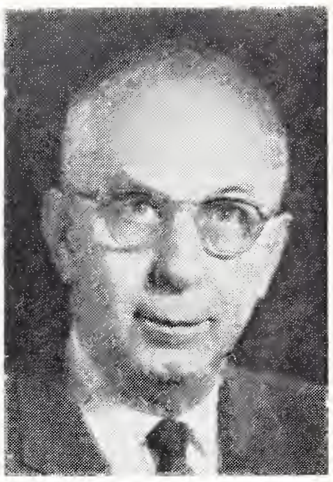
Dr. Howard A. Nelson, Greenwood, vice speaker of the House of Delegates and past president of the association, will preside over the seminar. Dr. Crenshaw will keynote the program.



Rev. Varley

The AMA representatives, Dr. Rouse, a prominent Baptist leader, and the Rev. Dr. McCleave, a Presbyterian clergyman on the AMA Chicago staff, are expected to discuss the new national program of medical organization

which has been operational on a pilot basis for a year. Dr. McCleave is director of the new AMA department whose purpose it is to establish effective communication between clergymen and physicians at local, state, and national levels; to develop deeper understanding between theological science and medical science; and to develop areas of interrelationship between doctors and ministers, creating mutual awareness of concerns, problems, and changing ideas of each.



Dr. Rouse

The AMA program is guided by a 20 member committee comprised of equal numbers of clergymen and physicians. Initially, in the pilot phase, consultations and conferences have been conducted with leaders of 15 religious faiths at national level and in the states of Arizona, Georgia, Iowa, Maryland, Montana, New York, Ohio, Texas, and Utah. During 1963, the program will be extended to all states and those U. S. territories having AMA constituent associations.

Drs. Crenshaw and Sutherland said that the seminar would open at 9 a.m. at the Buena Vista, annual session headquarters, with no other activities scheduled in conflict. The four day meet will begin with the House of Delegates on the afternoon of May 13 with scientific section programs beginning Tuesday, May 14. More than 65 technical and scientific exhibits will be presented and 15 specialty societies are expected to meet concurrently with the Biloxi session.

The Auxiliary general meeting will be conducted May 14 with pre- and postmeeting activities on the days before and after. MSMA officers, trustees, and council members will be elected by the House of Delegates at its final meeting on May 16. The annual association banquet and dance is set for Wednesday, May 15.

Yazoo City Home To Be Run In Conjunction With Hospital

The newly-opened Martha Coker Convalescent Home in Yazoo City is the first in the state to be constructed in conjunction with a general hospital.

The home is under the same administration as the 77-bed King's Daughters Hospital across the street. The hospital administrator serves as administrator of both institutions, and the home fully utilizes the board of directors, medical staff, and personnel of the hospital. Each department of the home is under the supervision of a hospital department head.

A total of $425,000 was spent to construct the modern one-story, brick and steel facility. Thomas L. Askew is administrator of the hospital and the home.

$700,000 Grant to UMC To Support Clinical Research

Almost $700,000 in a single new grant will power health research at the University of Mississippi Medical Center during the next four years.

The National Institutes of Health grant provides $372,643 to be spent over 22 months to set up, equip, and run a six bed temporary clinical research unit in the University Hospital. The balance of the award will run the facility for two more years.

By that time, according to Dr. Robert Q. Marston, the University Medical Center hopes to get approval and money for a 14-bed permanent unit.

Clinical research units permit carefully controlled study of human diseases in their natural setting—the patient, says Dr. Marston.

When the eight-story research wing is finished this spring, Dr. Marston adds, investigators will have ample room for their laboratory studies, financed by about $1,500,000 yearly grants.

Up to now, continues Dr. Marston, there has been no way to extend studies to normal and sick people because the necessary exacting care cannot be rendered on a busy general hospital floor. Without grant support, Dr. Marston explains, costs would be too high for either hospital or patient.

Among other knotty medical problems to be tackled in the new unit are the relation of salt to high blood pressure, the effects of sodium fluoride on persons with fragile bones, diabetes control and nerve conduction, the value of chilling patients with severe head injuries, and further refinements on stomach freezing for ulcers.

Existing space on the hospital's sixth floor will be converted for clinical research unit use with work scheduled for completion April 1.

Says Dr. Marston, "The clinical research unit, tailored to our needs, not only provides an essential complement to our present investigative program, but will allow more fruitful progress in clinical research in medicine in Mississippi."

MSU Surveyors Poll State Opinion on Alcoholism

Under a grant from the National Institute of Mental Health, sociology surveyors at Mississippi State University are polling public opinion in the state on alcoholic beverages, alcoholism, and alcohol education. Present funds for the study total $28,348 with the possibility that another $65,000 may be granted in April 1965 to extend the project.

Dr. Gerald Windham, assistant professor in the Department of Sociology and Rural Life at Mississippi State, is piloting the project. The university is cooperating with the Mississippi Study Committee for Alcohol Education which laid the groundwork for the study.

The Mississippi State project is the first comprehensive alcohol education program ever conducted in the United States. It is hoped by its originators that many problems associated with alcohol and alcoholism can be alleviated through this type of program.

One factor leading to the planning of the state survey was the discovery by a State Department of Health Study that Mississippi has one of the highest percentages of alcoholics in the nation despite its prohibition laws.

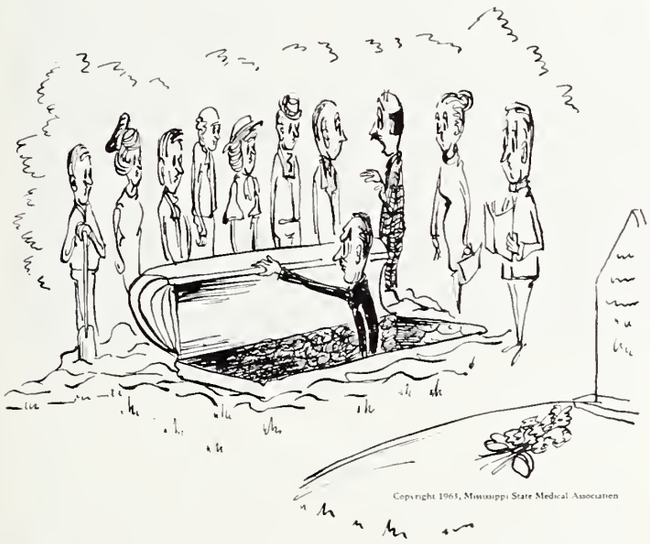
To date, Dr. Windham and Jerry Globetti, assistant professor in the Department of Sociology and Rural Life, have interviewed persons in various vocations in Tupelo. The remaining two-thirds of the study will be conducted in Clarksdale and in a Gulf Coast city to be determined.

"In these cities," said Dr. Windham, "we are asking a cross-section of the citizens—ministers, school teachers and board members, businessmen, lawyers, doctors, and laborers—their attitudes toward drinking, what they think alcoholism and alcohol education are, and what they feel the latter should be."

By gleaning these opinions from three major areas of the state, Dr. Windham hopes that the factors which play vital roles in the success or failure of alcohol education can be outlined.

In the course of the study the interviewers will also talk with high school students in the three sample cities and perhaps with students at a Mississippi university or college.

The facts accumulated from the study will be published for national distribution, according to Dr. Windham.



"I suppose he's right. We should get another doctor's opinion."

Dr. Hamernik Made Fellow Of College of Radiology

Dr. Fred J. Hamernik of Vicksburg was among more than 60 radiologists who were made fellows of the American College of Radiology at the group's annual meeting in Chicago on Feb. 8.

The degree of fellow is granted by the College to certified radiologists who have given distinguished service to their specialty over a period of years. Fewer than 1,000 of the College's approximately 5,200 members hold the degree of fellow.

Dr. Hamernik was graduated from the University of Louisville Medical School, Louisville, Ky. He is a member of the staff of the Vicksburg Hospital.

State Public Health Group To Host Regional Meet

The Mississippi Public Health Association will convene May 7 at the Buena Vista Hotel in Biloxi and then host the Southern Branch of the American Public Health Association in annual meeting May 8, 9, and 10.

Dr. A. L. Gray, executive officer of the Mississippi State Board of Health, will extend the welcome to the participating members from 16 states and the District of Columbia. The convention theme is "Partners in Health Services."

Speakers at a joint session of the Health Officers and Medical Care Section include Dr. Howard L. Bost, assistant vice-president for program and policy planning, University of Kentucky Medical Center; Dr. Milton I. Roemer, professor of

public health, University of California School of Public Health, and Dr. Russell E. Teague, commissioner of health for the Commonwealth of Kentucky. Presiding will be Dr. Robert D. Wright, Research, Evaluation and Planning Assistance Staff, Agency for International Development, Department of State, Washington, D. C.

The one-day MPHA session will focus attention on the subject "The Administration of the Public Health Program." The participants will include Dr. R. H. Hutcheson, Tennessee commissioner of public health, Nashville; Dr. H. B. Cottrell, regional public health service medical director, Atlanta; and Dr. Alton B. Cobb, chronic illness director, Mississippi State Board of Health, Jackson.

Ob-Gyn Board Announces Part II Exams

The American Board of Obstetrics and Gynecology has announced its next scheduled examination, Part II oral and clinical, for April 29-May 4, 1963. The examinations will be conducted by the entire board at the Edgewater Beach Hotel in Chicago.

According to Dr. Robert L. Faulkner, Board secretary, formal notice of the exact time of each candidate's examination will be sent in advance of the examination dates. Current bulletins of the board outlining the requirements for application may be obtained by writing to Dr. Faulkner at 2105 Adelbert Road, Cleveland 6, Ohio.

Rural Safety Conference Set for April 5-6

The National Rural Safety Conference will be conducted April 5-6, 1963, at the Drake Hotel in Chicago.

Sponsor of the conference is the AMA Council on Rural Health which is cooperating with the National Safety Council, National Farm Organizations, and allied health groups. The general theme of the meeting is "Farm and Home Safety —A Community Problem."

The major goal of the conference is to improve communication channels between all individuals and groups interested in rural health and safety problems. National organizations will report on resources available that may be disseminated through state and community groups. Farm equipment manufacturers will discuss their newest safety devices. Practical programs and projects pertaining to health and safety will be demonstrated. Other presentations will include rural safety as seen by practicing physicians, psychologists, psychiatrists, and orthopedic surgeons.

Further information may be secured from the Council on Rural Health, American Medical Association, 535 North Dearborn St., Chicago 10, Ill.

East Mississippi Society Hears Dr. Crenshaw



Hosts and guests take time out at the regular meeting of the East Mississippi Medical Society. From the left are Dr. C. P. Crenshaw, MSMA president; Dr. Robert M. Graham, society secretary; Dr. John E. Lindley, society president, and Dr. Glenn B. Carrigan, director of the East Mississippi State Hospital in Meridian where the meeting was held. In a brief address to the Society, Dr. Crenshaw reviewed activities of MSMA.

50 Papers Scheduled For Industrial Health Meet

More than 50 scientific papers will be presented at the 1963 American Industrial Health Conference scheduled for March 18-21 at the Sheraton-Park Hotel in Washington, D. C. This medical-nursing conference is staged annually by the Industrial Medical Association and the American Association of Industrial Nurses.

To be given particular attention at the Industrial Medical Association's 48th annual meeting will be reports from well-known authorities on such subjects as criteria for disability evaluation, silicosis in the metal mining industry, new therapeutic approaches to primary myocardial disease, newer concepts of shock, the role of the physician in space medicine, the common cold syndrome,

the woman worker from the gynecological viewpoint, and occupational mononeuropathies.

Participation in the conference is open to anyone who desires to attend, and the conference committee expects a total registration of approximately 2,000 persons, including physicians, nurses, industrial hygienists, safety engineers, health physicists, management and supervisory personnel.

Guest Lecturers To Head Faculty for UMC Seminar

Two guest authorities headed the faculty for the Jan. 17 Gynecologic Endocrinology Seminar at the University of Mississippi School of Medicine.

Visiting lecturers were Dr. Robert B. Greenblatt, professor of endocrinology at the Medical College of Georgia, and Dr. Robert W. Kistner, assistant professor of obstetrics and gynecology at Harvard Medical School. Their topics were family planning and endometriosis.

University faculty members also addressed the seminar emphasizing the practical aspects of endocrinology in various gynecologic problems encountered in practice.

A simplified scheme for recording vaginal bleeding was discussed by Dr. Karl A. Bolten, assistant professor of obstetrics-gynecology, who was also program coordinator.

Dr. Michael Newton, chairman of the Department of Obstetrics and Gynecology, talked about some endocrinologic aspects of galactorrhea, and Dr. Lois Mosey, assistant professor, reviewed diabetes and pregnancy.

From the Department of Pediatrics, Dr. Jose M. Montalvo, instructor, described abnormalities and variation of sexual development during childhood and adolescence.

Diagnosis and management of infants with ambiguous genitalia was the subject of Dr. J. Darrel Smith, associate professor. The role of endocrine laboratory tests was reviewed by Dr. Herbert Langford, associate professor of medicine.

Arrangements for the guest lecturers were made with the cooperation of G. D. Searle and Company. The seminar was acceptable for six hours of category I postgraduate credit for the Mississippi Academy of General Practice.



The University of Mississippi School of Medicine held its first Gynecologic Endocrinology Seminar on Jan. 17. The faculty included (left to right) Dr. Robert W. Kistner, assistant professor of obstetrics and gynecology at Harvard Medical School; Dr. Karl A. Bolten, assistant professor of obstetrics-gynecology; Dr. J. Darrel Smith, associate professor of pediatrics; Dr. Herbert G. Langford, associate professor of medicine; Dr. Lois M. Mosey, assistant professor of obstetrics-gynecology; Dr. Michael Newton, chairman of obstetrics-gynecology; Dr. Jose M. Montalvo, instructor in pediatrics, all from the University of Mississippi, and Dr. Robert B. Greenblatt, professor of endocrinology at the Medical College of Georgia.

Physicians Invited To Join Medical Writers' Group

Physicians interested in medical writing, in educational processes, in editing, publishing, or any other aspects of medical communication are invited to join the American Medical Writers' Association, according to James E. Bryan, executive secretary.

AMWA membership includes editors and publishers in the field of medicine, dentistry, nursing, and allied professional groups; writers and editors associated with hospitals, pharmaceutical companies, foundations, publishing houses and advertising agencies—and many physicians who are interested in problems of medical communications or who just want to write more effectively.

AMWA, now 20 years old, stages an annual two-day convention; provides a medical manuscript editing service and a national placement service for members; grants awards and certificates for outstanding accomplishments in medical writing and editing, judges medical writing contests, maintains a roster of lecturers on medical writing, and offers scholarships for persons contemplating a career in this field. The association publishes a monthly *Bulletin* as well as pamphlets on various aspects of medical writing.

Dues for AMWA are $10.00 per year. Further information may be secured from Dr. Bryan at 250 West 57th St., New York 19, N. Y.

Dr. Nelson To Chair State UCP Advisory Board

Dr. Howard Nelson of Greenwood has been named chairman of the newly organized Medical-Professional Evaluation and Advisory Board of the United Cerebral Palsy of Mississippi, Inc.

George J. Schweizer, Jr. of Columbus, president of the UCP of Mississippi, announced the formation of the board and presided over its organizational meeting on Feb. 2.

Other members of the ten-man committee are Dr. Orlando Andy, Dr. Richard Naef, Dr. Margaret Batson, Dr. H. C. Ricks, Travis McCharen, and J. T. Gilbert, all of Jackson; Dr. Samuel B. Caruthers of Grenada; Dr. John Allgood of Columbus, and Dr. Robert Peters of Hattiesburg.

Dr. J. Carter Denton of Birmingham, Ala., chairman of the Medical-Professional Evaluation and Advisory Board for Alabama was the principal speaker for the Feb. 2 meeting. Dr. Denton said the Alabama board has been most successful in assisting the State Program Service Committee of UCP of Alabama in establishing more effective programs and that it had rendered valuable assistance to corresponding medical-professional boards of local affiliates.

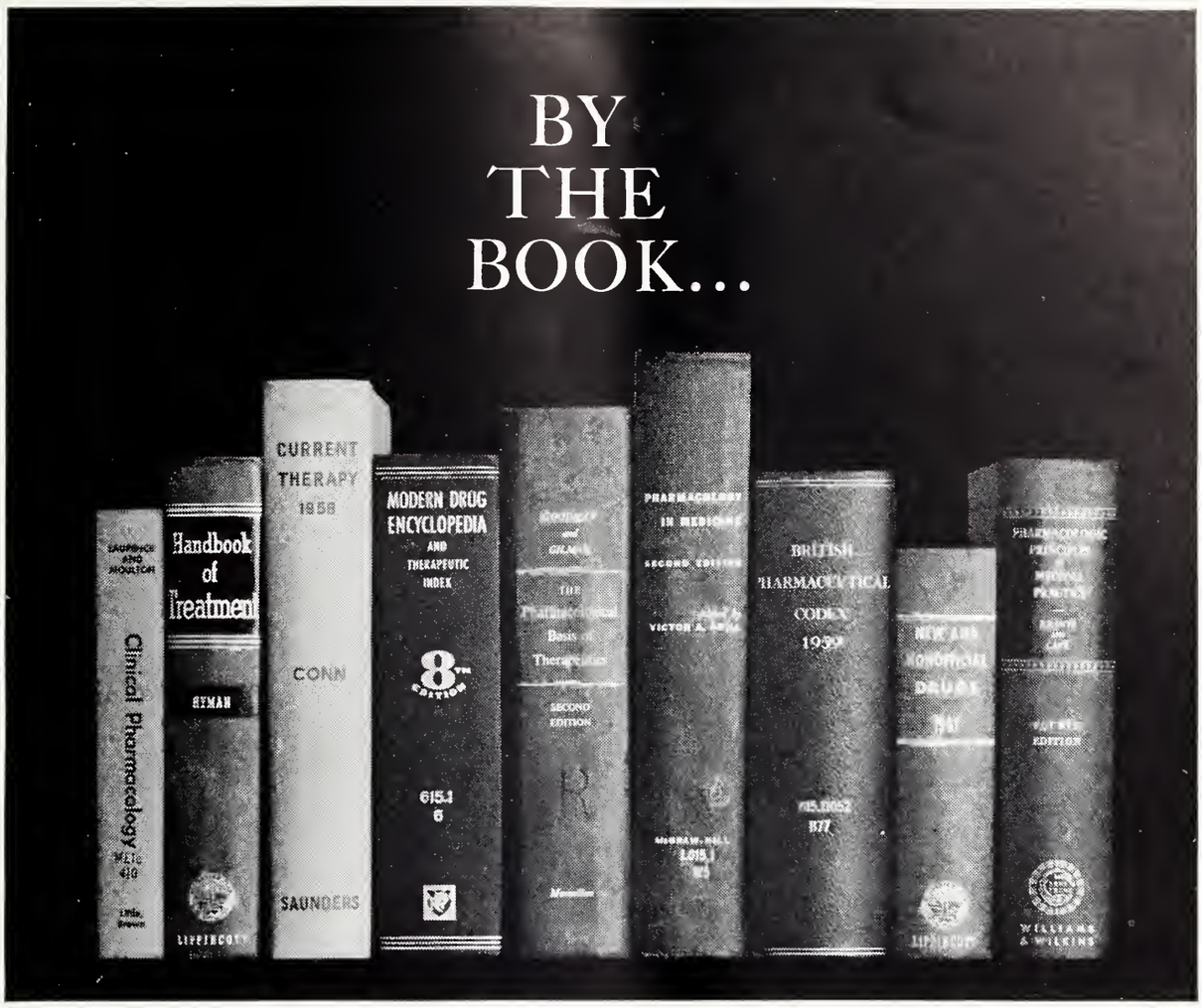
Mr. Schweizer said the Mississippi board would render similar services in Mississippi and would function independently with only the chairman serving on the executive committee and the Board of Directors of UCP of Mississippi.

Mr. Schweizer outlined for the board several urgent projects on which the UCP Board of Directors desired immediate evaluation and advice. He said the board would be used in the formation of all phases of the future programs of UCP of Mississippi, Inc. He said the board was established under the by-laws of the organization and was designed to include the medical, para-medical, education and welfare disciplines related to the problems and needs of the cerebral palsied in Mississippi. The members of the committee were approved by the UCP Board of Directors, Mr. Schweizer said.



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Research in the Service of Medicine

AMA Creates Commission On Graduate Medical Education

The American Medical Association has announced the creation of a Citizens Commission on Graduate Medical Education to study training programs for young physicians after they leave medical school.

Compared by AMA officials to the famed Flexner study of undergraduate medical education, the commission will evaluate internship and residency programs to determine how the doctor may be best prepared to provide society with excellent medical care.

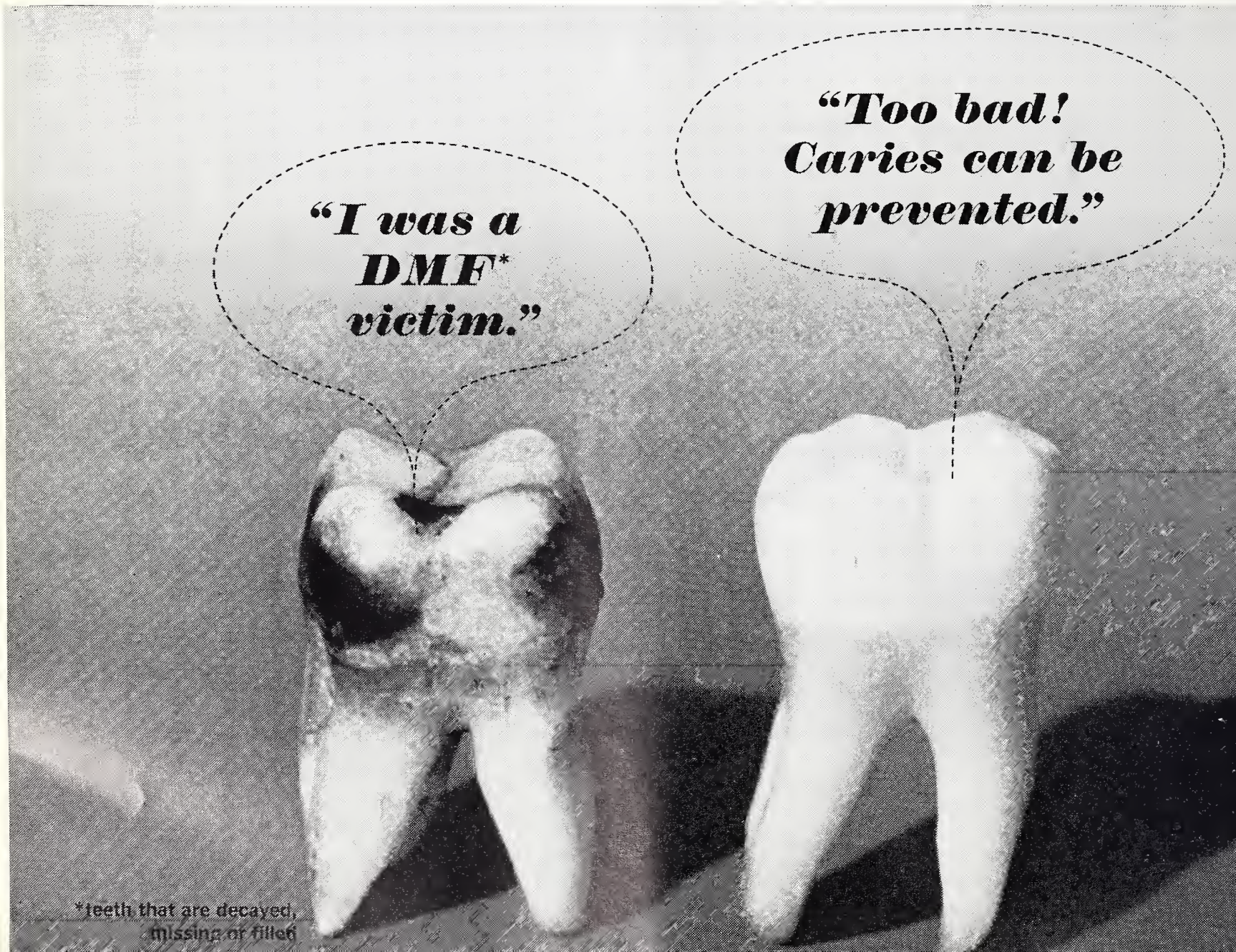
John S. Millis, Ph.D., president of Western Reserve University, Cleveland, will head the commission, which will be composed of 10 individuals with distinguished careers in public service and higher education. Dr. Millis said the full membership of the commission will be announced early next year. The survey is expected to require two years and will be financed by AMA.

Dr. Hugh H. Hussey, chairman of AMA's Board of Trustees said, "We are most pleased and grateful that Dr. Millis has accepted our invitation to serve as chairman of the Citizens Commission. His many outstanding accomplishments as a scientist and university educator have earned wide acclaim and assure imaginative leadership for this important undertaking."

Dr. Hussey said that the commission will have full authority to design and conduct the study in the manner it believes will be most effective. Findings and recommendations of the commission will be reported for consideration of the medical profession, universities and hospitals, and general public.

The survey of graduate medical education was recommended by the AMA's Council on Medical Education and Hospitals. The chairman of the council, Dr. Leland S. McKittrick, Brookline, Mass., said, "We look on this project as a logical extension of the Flexner study of our medical schools early in this century. At that time, medicine went outside its own ranks and requested the Carnegie Foundation to survey the medical schools phase of professional education. The resulting Flexner Report brought to our medical schools their current position of world leadership.

"Today," he continued, "we are concerned with a higher level of the educational process in medicine. Once again organized medicine is turning to distinguished public servants outside its own



ranks to assure a thorough and objective study for the advancement of medicine's service to the public."

The council, in recommending the study to the board, said the scope of the study could be limited by the acceptance of two premises: (1) Medical graduates have a relatively uniform level of competence and (2) Programs of formal education beyond medical school are required and primarily should be designed to provide the young physician with the further knowledge, experience, skills, attitudes, and judgment necessary for a career in medicine.

Chest Physicians Announce Meetings

The American College of Chest Physicians has announced the following schedule of forthcoming national and international meetings and postgraduate courses.

National and International Meetings—

29th Annual Meeting, American College of Chest Physicians, Ambassador Hotel, Atlantic City, June 13-17, 1963

Interim Clinical Meeting, American College of Chest Physicians, Portland, Ore., Nov. 30, Dec. 1, 1963

8th International Congress on Diseases of the Chest, American College of Chest Physicians, Mexico City, Oct. 11-15, 1964

Postgraduate Courses—

Recent Advances in the Diagnosis and Treatment of Diseases of the Heart and Lungs, Washington, D. C., Oct. 14-18, 1963

Clinical Cardiopulmonary Physiology, Chicago, Oct. 21-25, 1963

Recent Advances in the Diagnosis and Treatment of Diseases of the Heart and Lungs, New York City, Nov. 11-15, 1963

Recent Advances in the Diagnosis and Treatment of Diseases of the Heart and Lungs, Los Angeles, Dec. 2-6, 1963

Recent Advances in the Diagnosis and Treatment of Diseases of the Heart and Lungs, Miami Beach, Jan. 13-17, 1964

Complete details of all meetings and postgraduate courses may be obtained by writing Murray Kornfeld, Executive Director, American College of Chest Physicians, 112 East Chestnut Street, Chicago 11, Ill.

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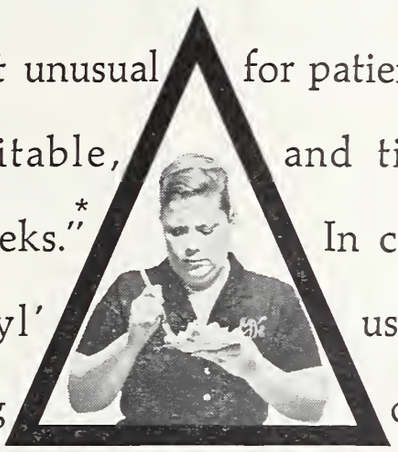
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Matlin, E.: The Obvious in Obesity, Clin. Med. 8:1071 (June) 1961.

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Virginia Medical College Sets Course in Nasal Surgery

An introductory course in "Expanded Surgery of the Nasal Septum and Closely Related Structures" will be presented April 28-May 1 at the Medical College of Virginia in Richmond.

The course will consist of lectures, laboratory and surgical demonstrations emphasizing primarily the maxilla-premaxilla approach to nasal septum surgery, examination and diagnosis of nasal form and function, variations of septum operations, medial and lateral osteotomies, mobilizing and modifying the nasal pyramid, treatment of nasal fractures, repair of septum perforations, and surgical management of nasal atrophy, atrophic rhinitis, ozena (endonasal microplasty).

The program will be under the sponsorship of the Department of Otolaryngology with the cooperation of the American Rhinologic Society. Dr. Peter N. Pastore, professor of otolaryngology and chairman of the department, and Dr. Maynard P. Smith, associate clinical professor of otolaryngology (rhinology), have arranged the program.

Dr. Maurice H. Cottle, professor of otorhinolaryngology, Chicago Medical School, will be the guest director, and in a series of lectures will also discuss historical, embryological, and anatomical considerations.

A preliminary program or other information may be obtained from Dr. Kinloch Nelson, director, continuation education program, Medical College of Virginia, 1200 East Broad St., Richmond, or American Rhinologic Society, 530 Hawthorne Place, Chicago.

Hahnemann Symposium Scheduled for April 15-17

The Ninth Hahnemann Symposium has been set for April 15-17 at the Sheraton Hotel in Philadelphia, Pa.

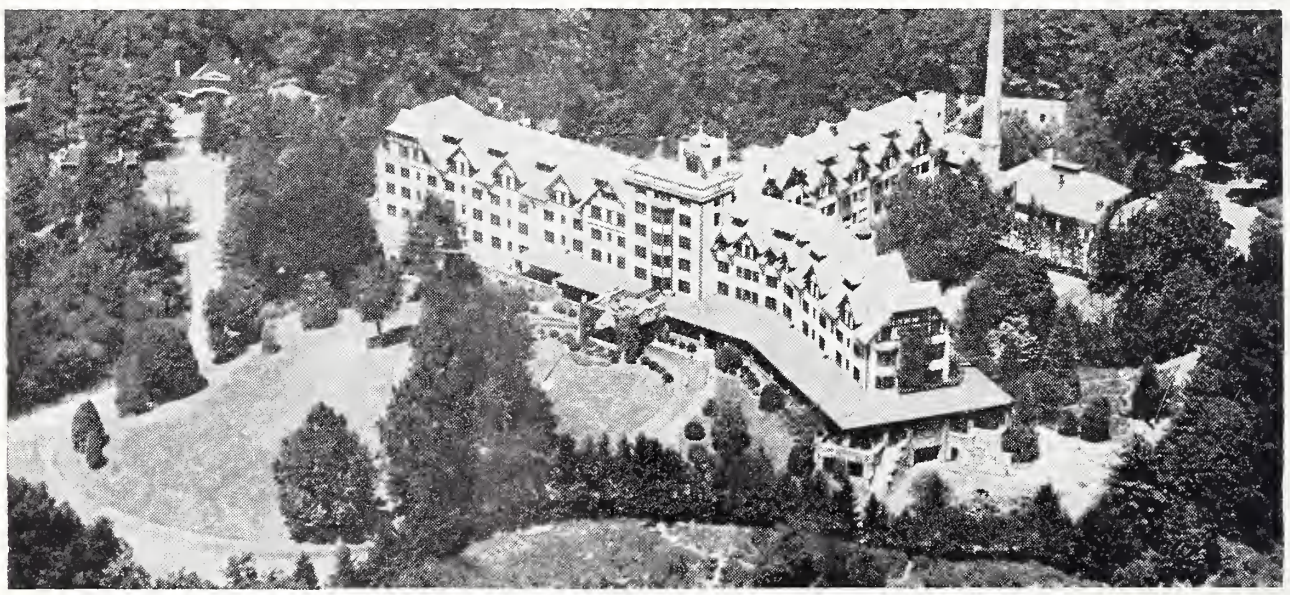
Subject of the symposium will be "The Theory and Practice of Auscultation." Dr. Bernard Segal is director and Dr. William Likoff and Dr. Daniel Mason are consulting directors.

Further information may be secured from Dr. Segal, Hahnemann Medical College and Hospital, 230 North Broad Street, Philadelphia 2, Pa.

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Articles for Publication

Manuscripts should be typewritten, double spaced on one side of the paper. Tables, charts, and tabulations should be submitted on separate sheets but their position in the text should be indicated. Authors are encouraged to limit bibliographies to 10 references, written in conformation to style utilized in scientific publications of the American Medical Association. Articles are accepted for publication on the condition that they have not been previously published and are contributed solely to this JOURNAL.

A thesis summary of 75 to 100 words must accompany each manuscript separately from the text. Figures and drawings are acceptable when prepared with black ink on white paper. Photographs for illustrations should be unmounted, untrimmed, glossy prints and all such material must be identified. No charges are made to authors for illustration engravings not exceeding four column inches per printed page.

Reprints may be obtained at cost from the association. The right is reserved to decline any manuscript for publication. Ordinarily, manuscripts submitted will be acknowledged whether published or not.



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FEMININE LOGIC

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Volume IV
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April 1963



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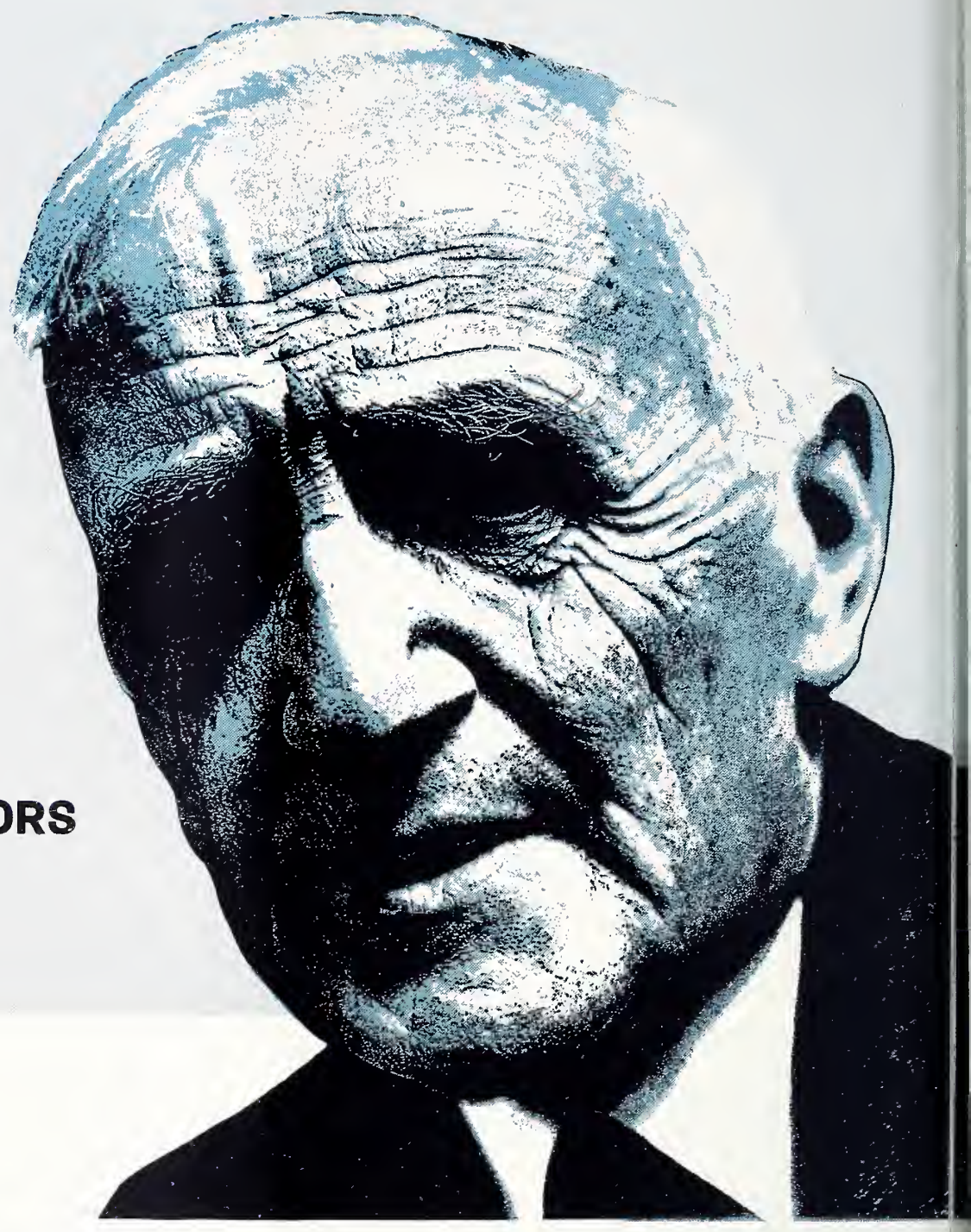
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April 1963

Dear Doctor:

Welfare-for-everybody-in-personal-services is the New Frontier byword in the 88th Congress. Over 25 carbon copies and variations of the new King-Anderson bill, H.R. 3920, compulsory federal medical care for aged under Social Security, have been introduced. The Bow bill, H.R. 21, tax credit for health care of aged, may have up to 50 sponsors.

> Latest administration pitch is socialized legal services in proposed system of federal public defenders. Little publicized, measure went up to Capitol Hill from White House in March. Still another is federal subsidy of city bus lines and commuter transportation.

A second try is being made to name new Jackson VA hospital for the late Congressman John E. Rankin. Rep. Thomas G. Abernethy has introduced H.R. 146 in new Congress to designate institution as the John Elliott Rankin Memorial Veterans Hospital. Similar measure was sponsored by Abernethy and both senators last year.

American Dental Association is going for fluoridation of public water supplies in earnest. Opening gun of campaign was debut of ADA's Fluoridation Reporter, bimonthly tabloid newspaper with national circulation. Deftly edited, paper covers both scientific and popular fields.

The doctor-draft will run another four years, Washington experts say, after approval of extension by House Armed Services Committee. AMA testified that physicians should be drafted only on same basis as other occupations but indicated agreement to extension if necessary for defense. Extra pay for physicians, dentists, and veterinarians will be continued.

Sixteen years of Hill-Burton has exerted enormous impact on expansion of American medical facilities, new report for U.S. Public Health Service says. Nearly 6,500 projects are completed or authorized, supplying about 275,000 new beds. Total cost has been $5.7 billion of which federal share was about $2 billion. Included are nearly 2,000 public health and diagnostic units. Over 130 projects have been built in Mississippi.

Sincerely,

Rowland B. Kennedy
Executive Secretary

DATELINE - MEDICAL AMERICA

AMA-ERF Loans Figure Prominently In Medical Education

Chicago - One medical student out of 10 in 83 American schools has secured a long term, low interest loan under the AMA Education and Research Foundation's program. Mississippi is eighth nationally in number of borrowers and University of Mississippi School of Medicine is sixth in number of loans. Nationally, almost $10 million has been loaned to 4,658 students, interns, and residents, all from private, non-governmental sources and secured with voluntarily given funds. Only 6.8 per cent of all applications have been rejected.

Famous 'Cancer-From-Smoking' Plaintiff Is Dead At 64

Pittsburgh - Otto Pritchard, the retired carpenter who almost made legal history, is dead - but not from lung cancer which he claimed was caused by cigarette smoking. Autopsy disclosed death was caused by pneumonia and pathologist's report stated that "there was no evidence of cancer or residual cancer." Pritchard sued Liggett and Myers twice, contending that smoking Chesterfields for 25 years gave him lung cancer. First suit was thrown out and second resulted in verdict absolving L&M of blame.

Aspirin Is Leading Cause Of Poisonings In Upstate N.Y.

Albany - Poison control centers in upstate New York reported 855 cases during the first six months of 1962 with aspirin the leading toxic agent. Baby aspirin, less than 5 grains, accounted for 113 poisonings, and aspirin in unspecified dosage form, for 133. Majority of cases resulted from excessive ingestion of internal medicines with household preparations second and paints and solvents third. Fourteen hospitals reported in survey.

State Supreme Court Sets Liability Precedent

Jackson - The Mississippi Supreme Court, reversing a trial court on outcome of malpractice action against a dentist, ruled that liability may result either from lack of professional skill or failure to apply it, if possessed. Trial court had ruled for defendant, holding that lack of skill and failure to exercise it are two separate grounds for suit. Citation is Newport v. Hyde, 147 So. 2d 113 (Miss., Dec. 3, 1962).

Incidence Of Disability In U.S. Remains Constant

New York - Studies by the Metropolitan Life Insurance Co. showed incidence of disability (defined as any disabling illness or injury for any period of time) in 1962 virtually identical to that of 1961. Rate was 147 per 1,000 last year, compared with 148 in 1961. For first time in years, diseases of digestive system outranked upper respiratory conditions. Accidental injuries came in third and circulatory disease, fourth.

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ORIGINAL PAPERS

Management of Head Injuries

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Modern understanding of the general physiological deficits which complicate acute head injury has resulted in the saving of many patients who might otherwise have succumbed to their injury. The author discusses altered physiological and pathological processes which may accompany severe brain damage and considers management of these problems.

While a certain percentage of patients with acute head injuries succumb to their wounds because of irreversible damage to vital parts of the brain, many patients succumb because of altered physiological processes and pathological processes other than the immediate brain damage. A few of these problems, most of which are secondary physiological changes requiring careful consideration, are shock, pneumonia, acute adrenal insufficiency, nutritional failure, thermoregulatory disturbances, electrolyte disturbances, uremia, and renal shut-down. In addition to these problems, there are surgical lesions which produce increased intracranial pressure, subdural hygroma, subdural hematoma, intracerebral hematomas, localized areas of brain maceration with cerebral swelling, and extradural hematomas.

In the scope of this paper each of these problems will be briefly discussed, as well as other surgical conditions associated with head injuries, such as depressed fractures and extensive compound wounds of the head. These latter problems have established indications for appropriate surgery. At the same time, considerable advance has been made in the last few years in the area of diagnostic procedures to facilitate early, definitive diagnosis of pressure-producing lesions of a surgical nature.

The first general consideration in treating the patient with a severe head injury must be to evaluate properly his physiological deficit and to supply factors which are lacking and which are necessary for life. The most important factor is the provision, or maintenance, of an adequate airway. The patient in a semicomatose state with a good cough reflex presents but a slight problem. The head is positioned so that breathing is free and unobstructed, and, as he recovers, he becomes more and more able to take care of respiration and to deal adequately with his own tracheal and pharyngeal secretions. The unresponsive patient, depressed below the cough reflex response, is a major problem, and one should make use of early tracheotomy as a means of assuring a good air exchange and for ready access to the trachea and bronchi for aspiration of mucous secretions. A great many patients can be saved from death due to atelectasis and pneumonic consolidation by this procedure. It enables the physician to substitute careful suction and removal of tracheal and bronchial secretions in

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comatose patients unable to take care of their own secretions due to depressed or lost cough reflex.

A tracheotomy should always be performed in cases of head injuries associated with considerable damage to facial structures, such as fractures of the mandible and indriven fractures of the nasal structures, particularly in those patients requiring dental wire fixation to maintain alignment. The presence of a tracheotomy tube does not in any way interfere with closed system anesthetic techniques, and if an anesthetic is anticipated, an intracheal cuff can be slipped over a number 5, 6, or 7 intracheal tube prior to inserting the tube so that closed system anesthesia is easily carried out. Tracheotomy is particularly desirable in patients with severe head injuries who will be transported from one hospital to another. Head injury patients with extensive neck trauma and comatose patients who have obvious subcutaneous emphysema in the upper chest and cervical region should have a tracheotomy.

THE PULMONARY SYSTEM

It has been shown experimentally that there is a direct relationship between head injury and acute pulmonary edema. The possibility of this reducing vital capacity and oxygen exchange should be considered, and oxygen therapy should be employed freely in all deeply comatose patients. As far as further consideration of the pulmonary system is concerned, the need of frequently turning the patient is well known. Patients with severe head injuries should be turned from side to side not less than every 30 minutes to better aerate the lungs and promote drainage of bronchial secretions out into the trachea.

Finally, with regard to the pulmonary status of the patient in transportation, it is important that ambulance attendants and those responsible for transporting patients from the scene of an accident to the hospital and enroute from hospital to hospital should be fully aware of the dangers of regurgitation of fluids and food from the stomach with aspiration of the stomach contents. Transporting of patients with severe head injuries in the face down position is essential, as it utilizes the simple, physical principle that water will run down hill. When stomach contents do reach the nasopharynx, they will tend to run out the mouth and nasal passages rather than back and forth with the respiratory exchange in the trachea. I have had the unhappy experience of seeing many patients travel 100 miles by ambulance without difficulty but within five miles of the hospital regurgitate, aspirate, and drown. This is an avoidable complication, and every effort should be made to acquaint all those who have to do with emergency treatment and transportation of patients with head injuries with this ever-present danger.

Thermoregulatory disturbance due to midbrain contusion is often associated with hyperthermia and is managed by refrigeration down to 90-92° F. levels, either with a refrigeration blanket or direct application of ice.

TWO TYPES OF SHOCK

In the consideration of shock, two types of shock are of importance. One, commonly called surgical shock, is usually seen with mild head injuries, head injuries associated with other severe injuries, particularly fractures of the long bones, and head injuries associated with external hemorrhage. These cases are treated with the usual measures, using intravenous fluids or blood as indicated, but omitting the use of morphia or other drugs which might be classified as central depressants. This includes Demerol and other synthetic opium substitutes.

The second, and more serious, type of shock is that which is believed to be due to direct disturbance of the central vasoregulatory mechanism located in the hypothalamus and elsewhere. These patients demonstrate cold, damp, bluish-colored extremities with marked peripheral vascular collapse, thermal instability, air hunger, and they may develop symptoms of midbrain damage, such as bouts of decerebrate rigidity. This type of shock may frequently develop as a delayed manifestation, and if it is not recognized, it leads certainly to death. It is felt that hypothalamic dysfunction plays a large factor in this type of severe shock and that hormonal relationships between the hypothalamus and adrenal cortical output are interfered with. This condition, easily recognized, often responds satisfactorily to the administration of aqueous ACTH, 10 mg., intravenously in a drip or larger doses intramuscularly as a means of promoting improved adrenal cortical function or substitution therapy utilizing corticosteroids. Considerable interest has been aroused on the part of neurosurgeons recently in the use of Decadron in large doses, up to 10 mg., i.v. or i.m., daily. Not only does it have a beneficial replacement effect in these patients from a shock standpoint, it is thought to be quite important in the reduction of cerebral swelling, or edema, following brain trauma. Vasopressor substances are indicated and are utilized in

maintaining a normal blood pressure level until the patient can take over and control this physiological function on his own. Minor shock problems may be helped through an acute blood pressure drop by simple vasopressors such as Methedrine, Vasoxyl, or ephedrine. Others may require prolonged medication to maintain adequate blood pressure levels.

As a complication of severe shock states, renal damage is often observed, and renal shut-down may become the most important physiological deficit. If the shock state is not too prolonged and if the patient does resume physiological control of his blood pressure mechanism, these renal function disturbances usually recover. However, those that are quite severe may even require the artificial kidney as a means of boosting them through this period of inadequate renal function.

Where renal shut-down is involved and in all cases of severe head injury, electrolyte levels must be considered and maintained at normal levels. All fluids should be administered with the idea of maintaining a normal balance. Those electrolytes in deficit should be replaced, and those in excess should certainly not be subject to further loading in times of the altered physiology. A Foley catheter should always be used in cases of head injury patients who are incontinent. Total fluid intake should always be a normal daily requirement for an average adult, except in cases of renal shut-down. Then, the patient should not be overloaded with water.

ANTIBIOTIC REGIMEN

Since pulmonary infection is a recognized danger and fracture lines of the skull have an affinity for compounding into the nasal sinuses and mastoid areas, antibiotic medications have an established place in the routine management of severe head injuries. It is customary to use penicillin routinely in the deeply comatose patient. Additional broad spectrum antibiotics may be employed on the basis of individual choice. Patients with fracture lines entering the mastoid and paranasal sinus areas should probably have sulfonamides, as this drug will enter the spinal fluid in fairly high concentrations. This is particularly important in those patients that have cerebrospinal fluid leaks or who have had open, compounded wounds across the sinuses, through the nasal passages, or the mastoid cells. Direct compounded wounds through the skull and scalp usually are complicated by soiling and often by the introduction of foreign bodies such as rocks, glass, dust, sand, and asphalt. Some additional protection other than a good surgical debridement of the wound is afforded by the use of antibiotics.

Occasionally in those cases actually complicated by meningitis, intrathecal use of antibiotics is considered, and penicillin may be used in small increments of not more than 10-15,000 units per injection. The local use of penicillin and other antibiotics following debridement of compound brain wounds might be tolerated in small amounts; however, it has been shown to produce sufficient local irritation to bring about convulsions. For this reason, the local use of an antibiotic in an open brain wound is not generally advisable. Good surgical debridement should be employed with systemic antibiotics.

CLINICAL COURSE

In addition to the above important considerations, it should not be forgotten that careful observation of the clinical course of the patient is the best guide to the accurate evaluation of his difficulties and is the most important consideration in judging whether or not a head injury has some surgical complication. Frequent neurological checks for such things as deterioration of the level of consciousness and focal neurological signs are necessary. In the comatose patient a slight decrease in the quickness of response to painful stimulus in one extremity versus another may be sufficient evidence to suspect an intracranial surgical lesion, such as a subdural hematoma, intracerebral hematoma, or other pressure-producing lesions, and lead to definitive diagnostic evaluation and surgery.

During the acute phase, blood pressure, pulse, respiration, temperature, size of the pupils, the presence of voluntary motion, whether or not this is greater on one side of the body than the other, reflexes, the level of consciousness, and quickness of response of the patient to painful stimulus are all basically important as a possible guide to surgical complications. These basic observations should never be omitted. One might well say that the slightest deterioration in the improving head injury or an improvement that reaches a plateau and does not continue, indicates further evaluation is immediately advisable.

Convulsions, localized or generalized, have a serious import. They may be caused by brain laceration or contusion but are often caused by pressure of fluid or blood collection, either intracerebral, subdural, or extradural. Convulsions are an indication that early definitive diagnostic studies are indicated, especially if the seizures are localized or confined to one side. Status epilepticus following head injury should be managed

with anticonvulsants, such as Luminal Sodium, and Sodium Amytal, intravenously or intramuscularly. Dilantin Sodium and Pentothal Sodium have been suggested by Watson over prolonged periods of several days for deeply comatose patients with extensor seizures due to mid-brain damage.

Lumbar puncture may be dangerous and has no place as a diagnostic procedure. If surgical lesions have been excluded by adequate diagnostic studies, lumbar puncture may be used to drain off heavily bloody spinal fluid, as such blood may interfere with normal cerebrospinal fluid circulation.

DIAGNOSTIC ACCURACY

Since the general acceptance of Hypaque arteriography about six years ago, contrast studies of the circulation of the brain have so improved diagnostic accuracy with regard to traumatic surgical lesions that this method of evaluation is now employed rather than exploratory burr holes or definitive air studies, such as pneumoencephalogram and ventriculogram. In over 200 traumatic intracranial surgical lesions observed and treated in all hospitals in Jackson and on the services of all the neurosurgeons in Jackson in the past five or six years, there has not been one single diagnostic error. All of these films have been reviewed by more than one neurosurgeon and usually through conferences in more than one x-ray department. This is a rather remarkable degree of diagnostic accuracy and has certainly helped us to be much more secure in dealing with these problems. It has enabled us to avoid unnecessary exploratory trephine procedures and has enabled us to quickly and efficiently attack those lesions that are surgical in nature, such as intracerebral hematoma, subdural hematoma, extradural hematoma, and macerated, contused brain areas which produce pressure through the mechanism of localized tissue damage and cerebral swelling. It has enabled us, in lesions of the latter type, to actually avoid surgery on minimal areas of damage and bruising in several instances. The utilization of arteriography for diagnosis of traumatic lesions of the brain has facilitated the early treatment of important, acute collections of blood, both intracerebral, subdural, and extradural.

Early elevation of all depressed skull fractures should be carried out. This aggressive approach to these problems is not done so much to prevent any long-term complications as a result of depressed bone, particularly in areas silent and unlikely to be complicated by seizures, it is advocated because of the tendency for extradural hematomas to propagate from the site of a depressed skull fracture. In the fairly clean, compound wound and those that are uncompounded, the bone elements, after they have been elevated, can be left in situ and will reunite with the skull to restore skull continuity. In those cases that are rather badly contaminated by dirt, the bone elements perhaps should be discarded. If skull continuity is desired, cranioplasty can be done at a later date. Indriven compound injuries in the mastoid area and in the region of the frontal sinuses should be thoroughly debrided, and the dura should be repaired and reinforced with pericranium temporal fascia. Where the frontal sinuses are involved, complete exoneration of the frontal sinuses should be carried out, and if the ethmoids are involved, they, too, should be carefully exonerated. Wounds in this area should be drained, either down through the nose or through the eyelid or eyebrow area. Middle face injuries that have been driven up into the frontal sinus and ethmoid areas should be pulled down into position. If such middle face injuries extend on down to involve the maxilli, dental wiring should be employed to reposition and hold the fragments in place.

LONG-TERM EVALUATION

The long-term evaluation of deficits secondary to brain damage is one of the many areas that concern physicians who treat head injuries. We are all familiar with the completely disabled patient who has had a pneumoencephalogram which shows extensive brain atrophy, and we are all pleased with those patients with severe problems who recover and return to their normal everyday activities with no apparent impairment. Those patients that continue to complain of headaches, nervousness, and distresses of all sorts that they relate back to their injury are of constant concern to the surgeon, and their evaluation poses a considerable problem, particularly when medicolegal evaluation is requested. These evaluations are made with every consideration given to the problem in the hopes that one can arrive at a fair appraisal. It is well recognized now that certain postconcussion syndromes of nervousness, periods of instability, and alteration of drive and effectiveness can be secondary to moderate bruising injury to the temporal lobes. A certain percentage of deeply comatose head injuries are followed by convulsive tendencies that may require life-long protective medication. The electroencephalogram is an adjunct in the evaluation of such problems, but its value is limited, unless

there is strong clinical correlation between the EEG and known clinical syndromes. Pneumoencephalography may give additional information about localized or generalized atrophy caused by trauma. As chronic subdural hematomas may make themselves known weeks or months after a patient has recovered from the immediate effects of an injury, follow-up observations are important.

In conclusion, there is no doubt that the modern appreciation of the general physiological deficits which accompany the acute head injury has made it possible for us to salvage many patients who might have succumbed to their injury. Careful replacement or substitution procedures for absent physiological functions have resulted in survival of many patients with serious head injuries who otherwise might have succumbed to the initial effects of their brain damage.

Cerebral angiography has provided a diagnostic procedure for easy, accurate diagnosis of intracranial surgical lesions caused by trauma.

Considerable advance has been made in evaluation and management of some of the problems of moderate alterations of effectiveness observed in patients who have had important head trauma.

★★★

1151 North State St.

THE BLUE-HUED HUMANS

In underdeveloped countries, where TV commercials are just beginning to sell soap, U. S. firms are struggling with a difficult new problem—what skin tone to use in TV commercials to avoid offending white, black, or yellow-skinned customers. It costs too much to tailor each plug for each country. After much research and brainstorming, Madison Avenue's J. Walter Thompson came up with a solution which seems to work fine. It uses not people but animated cartoons—in which the "people" are a deep blue. "There's something wrong with every other color," a Thompson spokesman explained. "Red skin suggests the American Indian, or maybe something political. Yellow says Chinese, and you just can't do black. Green means sick. Blue is absolutely the only color that means nothing at all."

Renal Cortical Necrosis: Report of Four Cases

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Bilateral renal cortical necrosis is a rare pathologic phenomenon which may occur at any age. It is most commonly associated with complications of pregnancy, but has also been observed in conjunction with infections, burns, and major surgical procedures.

Death is the usual outcome. However, depending on the severity of the renal lesions, occasional cases may be salvaged by the use of artificial kidney dialysis or peritoneal dialysis and ion-exchange resins.

Renal biopsy may be of limited help in differentiating cortical necrosis from other renal diseases which lead to acute renal failure.

Although the etiology is obscure, bacterial endotoxins or lipopolysaccharides from other sources appear to play a prominent role in the development of renal cortical necrosis.

This paper reports four cases of renal cortical necrosis which were autopsied at the University of Mississippi Medical Center since 1959.

BILATERAL RENAL cortical necrosis is a rare pathologic entity characterized clinically by an abrupt onset of gross hematuria and flank pain, with subsequent development of anuria and uremia. The condition may occur in either sex and at any age. However, a majority of cases are associated with complications of pregnancy such as abruptio placentae, toxemia, or abortion.[1]

In 1941, Duff and More[2] reported 71 cases of cortical necrosis, 48 of which were associated with pregnancy. In all but one of the 48, the pregnancies ended with premature delivery and/or stillbirth. In most instances anuria began on the day of delivery. Fifteen of the remaining 23 patients were males. Associated events included infections and exposure to chemical toxins. Regardless of sex or associated conditions, the subsequent course was similar. Following the abrupt onset of hematuria and oliguria with rapid development of anuria and uremia, the patients went steadily downhill and expired, usually within the first week.

Campbell and Henderson[3] reported that renal cortical necrosis was not as infrequent in infancy and childhood as had been previously believed. They noted that infection often was present and that dehydration as a result of diarrhea and vomiting was also common. In addition, necrotic lesions of the gastrointestinal tract were found at autopsy in many instances.

Recently Wells *et al.*[4] in a study of 21 cases of cortical necrosis in patients ranging in age from ten months to 82 years, reported that only three were associated with pregnancy. Other related conditions included burns, major surgical procedures, gastrointestinal hemorrhage, and generalized peritonitis.

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Since 1959, autopsies have been performed at the University of Mississippi Medical Center on four patients with renal cortical necrosis. The purpose of this paper is to report these cases and to discuss briefly the pathologic, clinical, and experimental aspects of the condition.

PATHOLOGY

The gross appearance of the kidneys is characteristic (Figure 1). They are usually swollen and the capsules strip easily, leaving a mottled yellow and red surface. On cut section the cortex

appears grey to yellow and varies from a few scattered patches to massive confluent areas of necrosis outlined by red zones of hemorrhage. A thin subcapsular layer which is supplied by the capsular arteries is usually spared.

Microscopic examination reveals varied alterations depending upon the duration and severity of the process. The glomerular capillaries and afferent arterioles are dilated and contain hyaline thrombi or conglutinated red blood cells (Figure 2). The tubules may exhibit ischemic coagulative necrosis with the basic architecture remaining intact (Figure 3), or there may be total disruption of structural pattern. The areas of necrosis are usually surrounded by hemorrhagic zones or polymorphonuclear leukocytic reaction. In addition, necrosis of small arteries and arterioles is often present with deposition of hyaline fibrinoid material in their lumina and walls.



Figure 1. Kidney from Case 1 showing almost complete coagulative necrosis of the cortex.

Lesions also may be present in other organs. These include the lungs, liver, heart, adrenal glands, gastrointestinal tract, uterus, placenta, brain, and pituitary gland. Such changes are hemorrhagic or necrotic in nature and, as in the kidneys, appear to result from ischemia due to vascular occlusion associated with accumulations of fibrinoid material.

CASE REPORT 1

A 23-year-old Negro male developed headache, cramping abdominal pain, and weakness the morning after a drinking bout. The following day he became anuric and was hospitalized. After four days, during which he was given oral feedings, water by mouth, and a total of 4,000 ml. of 5 per cent dextrose in water, he was transferred to another hospital. He received 1,000 ml. of intravenous fluids daily for four additional days and was then referred to the University Medical Center.

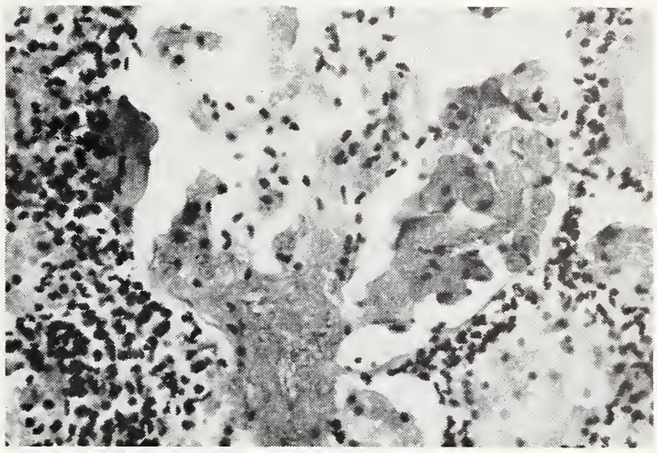


Figure 2. High magnification photomicrograph of a glomerulus from Case 2. Note thrombosis of arteriole and occlusion of glomerular capillaries by hyaline material. The glomerulus is surrounded by inflammatory cells.

Past history was noncontributory, save that he had treated a pruritic, pigmented, skin eruption of the abdomen and buttocks for three months with a topical ointment containing salicylic acid, sulphur, and ammoniated mercury. Physical examination on admission revealed a blood pressure of 140/70, pulse 92, respiratory rate 20, and temperature 98.6° F. The fundi showed grade I AV nicking, and there was a grade II systolic murmur heard loudest over the pulmonic area. Urinalysis revealed 4+ albuminuria and micro-



Figure 3. Low magnification photomicrograph of kidney from Case 4 showing coagulative necrosis of tubules and glomeruli, and associated inflammatory reaction.

scopic hematuria. The nonprotein nitrogen was 228 mg. per cent, creatinine 28 mg. per cent, sodium 128 mEq/L, potassium 7.1 mEq/L, CO_2 12 mEq/L, and chloride 89 mEq/L. The ASO titer was 125 units. Total serum proteins were 4.6 gm. per cent, with 2.4 gm. per cent albumin and 2.2 gm. per cent globulin. Chest x-ray showed possible cardiomegaly, and a flat plate of the abdomen was suggestive of paralytic ileus. A retrograde pyelogram was within normal limits. The EKG showed tall, spiked T waves, suggesting hyperkalemia.

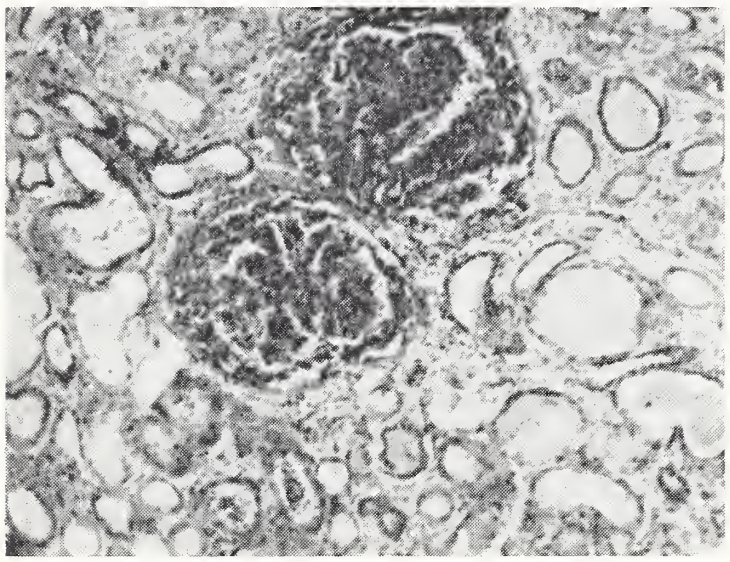


Figure 4. Two hypercellular glomeruli are shown. Note the large cellular epithelial crescents.

The patient was treated with sodium-ion exchange resins, minimal fluid intake, and underwent three hemodialyses by artificial kidney. Despite these measures, anuria persisted and the nonprotein nitrogen rose to 440 mg. per cent. He developed pulmonary edema and pneumonia and expired 19 days after admission.

Autopsy findings included pericardial effusion, severe aspiration pneumonitis, and pulmonary edema. The most striking finding was nearly complete cortical necrosis of the right kidney. The left kidney was enlarged and pale, but contained only one small area of cortical necrosis. Microscopically, these areas were characterized by extensive coagulative necrosis. In addition, uninvolved glomeruli from both kidneys were markedly enlarged and showed complete occlusion of capillary lumina by proliferation of endothelial cells. Neutrophils were present within and around the glomerular capillaries, and numerous large epithelial crescents were present (Figure 4). A blood culture taken at autopsy showed a heavy growth of *Pseudomonas* and an unidentified gram-negative rod. Toxicologic determinations for heavy metals were negative.

CASE REPORT 2

A 28-year-old Negro female, with a history of five abortions and one stillbirth, was admitted to another hospital during the fifth month of her ninth pregnancy because of the sudden onset of chills and fever. She had a history of frequent urinary tract infections, particularly during pregnancy. The hemoglobin was 10 gm. per cent, white blood cell count 3,800 with 42 per cent lymphocytes, 36 per cent segmented and 22 per cent band form polymorphonuclear leukocytes. A urinalysis was normal. Shortly after admission, a nonviable fetus was delivered spontaneously with minimal blood loss. Twelve hours later she developed profound shock which did not respond to vasopressor amines or steroids, and she subsequently became anuric.

She was admitted to the University Medical Center 24 hours after the onset of shock. The peripheral pulse and blood pressure were undetectable, temperature was 97.2° F, and respirations were irregular and gasping. Her skin was cool and clammy and there was cyanosis of the extremities. Pelvic examination revealed the uterus to be of normal postpartum size with no evidence of hemorrhage or infection. The bladder contained no urine. Hematocrit was 35 per cent, white count 45,000, and clotting time was normal. Two blood cultures were negative. A vaginal culture grew out *Escherichia coli*. Transfusion was begun, and she was given intravenous steroids and antibiotics. Despite these efforts, she expired one and one-half hours after admission.

Autopsy revealed bilateral pleural effusions and small areas of hypostatic pulmonary atelectasis. A culture of residual placental tissue, which was present in the uterus, showed no growth. Blood culture was also negative. The kidneys were of normal size and exhibited multiple, small, confluent, yellow infarcts surrounded by thin zones of hyperemia. Microscopically, these areas differed, some showing ischemic necrosis with an intact architecture, while in others there was disruption of tubules. The latter areas contained some early calcification and were surrounded by a zone of polymorphonuclear leukocytes. A few thin subcapsular and juxtamedullary areas of viable tissue were observed, and several areas of chronic pyelonephritis were present. Many glomeruli were hemorrhagic. Others appeared necrotic, and their capillary loops contained hyaline thrombi. Occasionally these thrombi extended into

the arterioles, and similar hyaline material was observed in several small arteries. In addition, large areas of hemorrhage and small foci of ischemic necrosis were present within the cortex of each adrenal gland.

CASE REPORT 3

An 11-month-old white male was admitted to another hospital because of diarrhea and vomiting of five days' duration. Oliguria developed on the day of admission. Following administration of 1,500 ml. of clysis fluids, he began having generalized seizures and developed edema. He was digitalized, given diuretics, and treated with antibiotics. Anuria and diarrhea continued, and the patient was referred to the University Medical Center two days after the initial hospitalization.

Physical examination revealed a comatose male infant with generalized edema, blood pressure 120/80, pulse 110, temperature 98° F, and respiratory rate 28. The hematocrit was 43 per cent, white count 27,950 with a marked left shift, and urinalysis showed 4+ albuminuria. Blood urea nitrogen was 126 mg. per cent, sodium 110 mEq/L, potassium 7.2 mEq/L, chloride 75 mEq/L, and CO_2 14 mEq/L. An EKG showed spiked T waves consistent with hyperkalemia. Blood cultures were negative. A stool culture revealed a heavy growth of *Pseudomonas* which was resistant to all antibiotics tested except Polymyxin B.

The clinical impression was acute renal failure of unknown etiology complicated by water intoxication. The patient received electrolytes and was digitalized because of tachycardia and a gallop rhythm. Peritoneal dialysis was performed twice during the first 24 hours with the removal of 1,200 ml. of fluid. The edema decreased markedly, and the serum electrolytes approached normal levels. However, anuria persisted, and he began having dark stools which contained occult blood. Another period of peritoneal dialysis was instituted. However, he expired on the third hospital day.

Autopsy revealed mild pulmonary edema and pleural effusions. Punctate hemorrhages were present throughout the liver. Microscopic examination of these areas revealed them to be hemorrhagic foci with necrosis of hepatic cells. The bowel appeared edematous. Large areas of patchy necrosis involving the mucosa and submucosa were present in the duodenum and rectosigmoid. Microscopically, these lesions showed ischemic necrosis with a small amount of hemorrhage, and many vessels contained hyaline thrombi. Bilateral cortical necrosis of the kidneys was present. Microscopic examination revealed morphologic alterations quite similar to those observed in Case 2.

CASE REPORT 4

A 63-year-old Negro female was admitted to UMC because of vaginal bleeding following cobalt therapy for stage III epidermoid carcinoma of the cervix. Ligation of both hypogastric arteries was performed to control the bleeding. Approximately 15 days postoperatively she developed cramping abdominal pain, melena, and hematuria. Urine output decreased, and she became completely anuric five days later. She expired on the 22nd postoperative day.

Autopsy revealed residual epidermoid carcinoma of the cervix with metastases to periaortic, pelvic, and mediastinal lymph nodes. Necrotic areas were found in the gastrointestinal tract associated with thrombosed arterioles in the bowel wall. Small areas of adrenal hemorrhage were also observed. Diffuse bilateral renal cortical necrosis was present, and microscopic examination revealed alterations similar to those described in the previous cases.

ETIOLOGY

The etiology of renal cortical necrosis is unknown. Many authors believe that the necrosis is the result of ischemia due to vascular spasm and that the characteristic hyaline thrombi represent a later complication. Duff and More[2] postulated that the vasospasm is probably the result of an allergic reaction involving arterial walls and would thereby explain the suddenness of onset.

Bilateral renal cortical necrosis can be produced in animals by several different experimental techniques. Most of these methods utilize the intravenous administration of bacterial endotoxin at some stage of the procedure. The reaction produced is known as the generalized Shwartzman phenomenon, and the necrotic lesions are associated with the deposition of a dense homogeneous eosinophilic material within the glomerular capillaries and renal arterioles which has the tinctorial features of fibrinoid. Similar material may also be observed within coronary arterial walls, cardiac valves, splenic sinusoids, hepatic veins, pulmonary arteries, and arteries of the bowel wall.

MacKay et al.[5] noted the remarkable similarity of these experimentally induced lesions to changes associated with eclampsia and bilateral cortical necrosis in humans and suggested that these conditions might have a common etiological background.

As further evidence, Apitz[6] reported that a single intravenous injection of bacterial endotoxin

into pregnant rabbits resulted in renal cortical necrosis and diffuse cardiovascular fibrinoid lesions. The active fraction of bacterial endotoxin producing these changes is known to be a lipopolysaccharide. It is possible that such a substance may be absorbed into the maternal circulation as a result of uterine ischemia and necrosis, or due to separation of the placenta.

Abruptio placentae was not present in Case 2 of the present report. Although blood cultures were negative, gram-negative bacteremia cannot be ruled out and may have played an important role in the production of cortical necrosis.

A blood culture from Case 1 grew out *Pseudomonas* and a gram-negative bacillus. In this case, subacute glomerulonephritis was an associated finding. It is interesting to note that similar lesions can be produced in rats by the administration of nephrotoxic serum in conjunction with gram-negative endotoxin.[7] Nephrotoxic serum is a heterologous specific antiserum produced in rabbits by repeated immunization with rat kidney homogenate. When administered alone to rats, it produces glomerulonephritis. However, the addition of endotoxin results in renal lesions strikingly similar to those observed in Case 1, suggesting a similar etiologic background.

In Case 3, the history and subsequent course are typical of previous reports of renal cortical necrosis in infancy. There is usually an underlying gastroenteritis or upper respiratory infection.[3] Blood cultures were negative in this case. However, stool culture revealed a resistant *Pseudomonas*. It is possible that the lesions observed in the bowel may have resulted in the release of endotoxin or endotoxin-like substance into the blood-stream thereby leading to the renal alterations.

In Case 4, the patient received abdominal radiation for carcinoma of the cervix. It is of interest that the generalized Shwartzman reaction can be produced in rabbits by abdominal radiation in conjunction with the intravenous administration of endotoxin.[8] It is possible that radiation may have initiated the bowel lesions observed in Case 4 and that these lesions resulted in the entry of gram-negative bacteria or their products into the blood-stream.

The experimental production of renal cortical necrosis associated with intravascular deposition of fibrinoid material has been correlated with a decrease in plasma fibrinogen levels.[9] It is well known that hypofibrinogenemia is common in complications of pregnancy associated with cortical necrosis. It seems possible that these lesions, whether or not associated with pregnancy, are in some way related to alterations in blood clotting mechanisms and that such alterations are produced by toxic substances which have gained access to the circulation.

DIAGNOSIS

It is important to differentiate massive cortical necrosis from entities such as tubular necrosis which are potentially reversible. Total anuria is a common feature of cortical necrosis but is rare in patients with tubular necrosis who usually excrete small amounts of urine daily.[10] Gross hematuria is not as frequent with tubular necrosis, although this feature does not sharply differentiate the two conditions. Microscopic examination of the urinary sediment is usually not helpful in differentiation.

Other conditions which may closely simulate the clinical picture of renal cortical necrosis are lower urinary tract obstruction, acute glomerulonephritis, acute bilateral renal artery or vein occlusion, necrotizing papillitis, acute fulminating pyelonephritis, systemic collagen diseases with massive arteritis, and multiple infarctions due to embolization. The clinical course and mode of development of the renal shutdown may be helpful in distinguishing these conditions, but their clinical differentiation may not be possible.

Percutaneous needle biopsies of the kidney have been used as a method of diagnosis.[11, 12, 13] This procedure is of value if massive cortical necrosis is present or if more specific lesions such as glomerulonephritis exist. However, it is possible that patchy areas of necrosis will be missed by the needle and, in many instances, the patient's condition may contraindicate this procedure.

Treatment of renal shutdown due to cortical necrosis should be the same as that used in patients with acute renal failure from any cause. Artificial kidney hemodialysis and peritoneal dialysis in association with ion-exchange resins have been utilized in the hope that the lesion did not involve the entirety of both kidneys and that the anuria might, therefore, be temporary and reversible. Recovery following hemodialysis has been reported.[13] However, in most cases, the patients expired even though life may have been prolonged.[4] Similarly, Case 1 was treated with hemodialysis and survived 27 days after the onset of anuria despite severe involvement of the kid-

neys. In contrast, the other three patients survived only a short time. ★★★

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THE ROOT OF THE PROBLEM

Noticing that one little boy always used a black crayon for his drawings of horses, cows, barns, trees, and whatever else, the second grade teacher became concerned about the state of the child's mind. She had a conference with his parents, and with the cooperation of the principal, they called in a psychiatrist. Talking to the boy, they got to the root of his trouble. He'd lost all his crayons—except the black one.

Recent Advances in Otologic Surgery

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In recent years major advances have been made in the development of surgical procedures for the improvement of hearing. The author discusses types of hearing loss that may be helped by surgery and describes specific techniques.

GREAT STRIDES have been made in otology in recent years with the major portion of these advances in the development of new surgical procedures designed to improve hearing. This paper will review briefly some of these advances.

Not all cases of hearing loss can be helped. In order to demonstrate the types that can be meliorated, it is necessary to review the different types and causes of hearing loss.

TYPES OF HEARING LOSS

There are basically two types of hearing loss—perceptive and conductive. *Perceptive* hearing loss is brought about by some type of disorder within the cochlea or hearing nerve itself. Included in this category are most congenital cases, those resulting from trauma, and the hearing loss of the aged. The main thing that all these types of hearing loss have in common is that there is no known treatment for any of them.

Conductive hearing loss, as the name implies, represents the various hearing losses caused by an interference with the conduction of sound from the outside air to the hearing nerve. This includes numerous conditions, the simplest of which is a plug of wax in the ear canal. Included also in this group would be such conditions as blocked Eustachian tubes, a condition which is often encountered in children and which may be relieved in most instances by complete removal of the adenoids. Still other conditions in this category include otitis media, perforation of the drum, serous otitis, fixation of one or more of the ossicles by scar tissue, fractures or dislocations of the ossicles, and otosclerosis about the foot plate of the stapes.

Recent surgical procedures have been designed to correct many of these conditions. For example, in cases of serous otitis we now insert a small piece of polyethelene tubing through the drum and leave it from six to twelve months rather than do repeated myringotomies. Perforated drums are now being successfully closed by means of myringoplasty and tympanoplasty. These procedures were introduced by German workers as recently as seven years ago.

OTOSCLEROSIS

Otosclerosis is the most common cause for deafness in individuals in young and middle adult life and consequently more work has been done on this than any other one condition. To begin with, the fenestration operation was developed in 1938 and was performed successfully throughout the country until early in the 1950's when Rosen[1, 2, 3] introduced a technique for mobilizing the fixed stapes.

His method consisted of making an incision in the skin of the ear canal about 4 mm. lateral to the drum beginning superiorly at about 12 o'clock and extending downward along the posterior wall to about 6 o'clock. The skin and periosteum was then elevated down to the annular ring of the drum. The drum, with the skin attached, was lifted out of its sulcus and folded forward until the posterior one-half of the middle ear was open. A small portion of the posterior superior aspect of the bony annular ring was then taken down with a curette in order to better visualize the stapes. This approach to the middle ear is still used in present day stapes surgery.

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In Rosen's original technique, he then applied pressure to the stapes through its neck until the otosclerotic process broke loose and allowed the foot-plate to again move freely and normally or until the crura of the stapes fractured, at which point the operation was terminated with the patient's hearing unimproved. This procedure improved the hearing in about 35 per cent of the cases in which it was used. Unfortunately a large percentage of those who obtained improvement had a refixation of the stapes by a regrowth of the otosclerotic process.

VARIATIONS IN TECHNIQUE

As other workers began to do this work, variations in technique were evolved. Various picks, chisels, and hammers were devised to help loosen the foot-plate. The percentage of improvement crept upward until some writers were reporting as much as 65 per cent success. Fowler[4] of New York recommended a technique to be used in those cases where only one crus was involved in the pathological process. It consisted of cutting the foot-plate in half and severing the crus involved. Juers[5, 6] of Kentucky then recommended severing both crura, cutting or chiseling free the central portion of the foot-plate, and advancing the severed tip of the posterior crus forward until it impinged upon the freely moving fragment of foot-plate. This procedure was a very successful and satisfactory method of restoring the hearing. However, results were not lasting. Many of these fractured foot-plates will heal, and the patient will again be hard of hearing. Other workers began removing the head, neck, and both crura of the stapes; fracturing the foot-plate, and applying polyethelene stints from the lenticular process of the incus down to impinge upon the fractured foot-plate. This procedure was quite successful and is still used in selected cases.

STAPEDECTOMY

At about this time John Shea[7] of Tennessee began to experiment with the complete removal of the stapes and to apply a vein graft to the open oval window and then apply polyethelene stints from the lenticular process of the incus down to the central portion of the vein graft. This has proven to be a successful method of handling most cases. Unfortunately, it is fraught with the possible complication of labyrinthitis with a dead ear as a result. According to the most recent statistics, however, this has occurred in less than 0.5 of 1 per cent of all cases. Most workers in this field now feel that the most successful method of managing these cases consists of stapedectomy —covering the open oval window with some material such as vein, muscle, connective tissue, fat, or some synthetic material such as Gelfoam and the application of a metal or plastic prosthesis from the incus to the covered oval window. Work in this field is progressing rapidly. Most of the techniques that I have described have been developed within the past three to four years, and it is quite likely that newer methods will have made these obsolete within the next couple of years.

With Shea's original stapedectomy technique serving as a basis, Harold Schuknecht[8] developed a prosthesis using fat as the grafting material and stainless steel wire as the stint. Kos[9] uses a vein plug and a stainless steel wire stint. Howard House,[10] who first used Gelfoam as a graft with a polyethelene stint, has now changed to a stainless steel wire stint still on a Gelfoam graft. I believe that one of these basic techniques is followed by nearly all workers in this field. Shea has further contributed to this work by developing the micro drill, which can be used to help remove markedly thickened or firmly fixed foot-plates.

GERMAN TECHNIQUES

Let us return for a moment to the new techniques introduced by German workers for the purpose of eliminating middle-ear and mastoid disease and at the same time improving hearing. These operative procedures are referred to as tympanoplasties and myringoplasties. It is fairly unanimously accepted in this country that the method of mastoidectomy developed by these workers is quite valuable in that it preserves a sufficient amount of the middle ear structure to be able to preserve or restore the hearing. Most of us, however, believe that the more extensive infections should be handled in two stages. In the first stage, all diseased tissue is eliminated. In the second stage, an attempt is made to reconstruct some type of ear drum by means of grafts and at the same time to apply whatever type of prosthesis is needed to restore hearing.

The myringoplasties, on the other hand, have not only proven satisfactory in the hands of American workers but have, we think, been improved. This procedure consists of closing central perforations of the ear drum where no infection or middle ear pathology exists. The major improvement made in this country has been the development of vein grafts to replace the skin. These procedures are usually highly successful,

and in many cases it is difficult to spot the corrected ear after six to eight months.

Harold Tabb[11, 12] of Tulane University School of Medicine is given credit for much of the original work in the use of vein as a graft material to the drum. It was used originally only in myringoplasties but now is used for all types of middle ear and drum grafts. Originally Gelfoam was used to fill the middle ear and served as support for the graft. Now clotted blood is used for this purpose. It seems to serve as a better nutrient and to be absorbed more rapidly and more completely.

Most statistical reports of present day stapedectomy and graft techniques show that hearing improvement to a serviceable level is brought about in 90 to 95 per cent of the cases of otosclerosis in which the procedure is done. In myringoplasties and tympanoplasties the results are somewhat lower. Those operations are successful in 65 to 75 per cent of the cases. It is hoped and expected that with improvement in techniques these percentages will improve rapidly. ★★★

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HIKE AT YOUR OWN RISK

Marathon walking is illegal (punishable by $100 fine or imprisonment) in JFK's home state. Massachusetts has had a statute prohibiting lengthy marches, for fun or profit, on the books since 1937 (height of the marathon dancing craze). Local officials say that 50-mile hikes are definitely covered by the statute.

Abdominal Pregnancy: Review and Case Report

THOMAS SCOTT McCAY, M.D., and TOXEY E. HALL, M.D.
Belzoni, Mississippi

Abdominal pregnancy is a rare but serious obstetrical complication which occurs about once in every 15,000 pregnancies. The majority of cases of abdominal pregnancy occur when a tubal pregnancy ruptures into the peritoneal cavity and the placenta retains its attachment and blood supply, thereby enabling the fetus to continue developing. Only a few cases of primary implantation of the fertilized ovum in the peritoneal cavity have been reported. The authors discuss diagnosis and managment of abdominal pregnancy and present a case.

ABDOMINAL PREGNANCY is a rare type of ectopic pregnancy which occurs about once in every 15,000 pregnancies. In a review of 204,565 deliveries in the Washington, D. C., area, Warfield reported an instance of one in every 34,094 deliveries in which duration of an abdominal pregnancy reached over 28 weeks.[1] The condition is 16 times more common in Negroes than in Caucasians.[1, 2]

The majority of cases of abdominal pregnancy occur when a tubal pregnancy ruptures into the peritoneal cavity and the placenta retains its attachment and blood supply, thereby enabling the fetus to continue developing. There are a very few reported cases of primary abdominal pregnancy wherein primary implantation of the fertilized ovum in the peritoneal cavity occurred.

After establishment of an abdominal pregnancy, the chances of survival of the fetus to a viable age are quite slim. Warfield reports a fetal mortality of 75-80 per cent in the cases where a viable age was reached.[1] Only two live infants were produced in a series of six cases of abdominal pregnancy which came to term. It has been noted that there is a high instance of congenital malformations among these infants.[3, 4]

Symptoms of early abdominal pregnancy are essentially those of a ruptured ectopic pregnancy since the condition almost always results from such an accident. Later, as the fetus enlarges, patients have symptoms of peritoneal irritation and generally do not feel well. Multiparae will sometimes state the pregnancy does not "feel right." Early physical examination reveals an extra-uterine mass and a uterus which is not enlarging as expected. Later, one may find the fetal parts to be easier to palpate than normal and frequently an abnormal position is noted. If the cervix is adequately dilated, the examining finger will fail to feel a presenting part within the uterus. Lateral x-ray examination may disclose fetal parts posterior to the anterior surface of the lumbar and sacral vertebrae. X-ray after injection of a radiopaque medium into the uterus will provide conclusive proof of the condition.[5]

Once a diagnosis of abdominal pregnancy is made, prompt operation is indicated. Generally, the procedure of choice is simply to remove the fetus, tie the cord close to the placenta, and close the abdomen without a drain. Occasionally, the placenta will be so attached as to allow for its removal, but any attempt at freeing up an adherent placenta will almost always result in profuse hemorrhage. Adequate blood for transfusion must always be readily available when doing this surgery as hemorrhage may be life-threatening.

In cases of abdominal pregnancy where a diagnosis is not made, the products of conception will undergo mummification, suppuration, calcification, or adipocere transformation. Sometimes ero-

Read before the 77th Semi-Annual Meeting, Delta Medical Society, Ruleville, April 11, 1962.

sion into the bowel, bladder, or vagina of parts of the fetus may take place.

The overall maternal mortality from abdominal pregnancy has been reported by Ware to be 14.85 per cent.[3]

SUMMARY

Abdominal pregnancy is a serious obstetrical complication. It usually begins as a tubal pregnancy which is extruded into the peritoneal cavity. Diagnosis is made by careful attention to the patient's history and by demonstration of fetal parts outside of the uterus. Treatment is surgical.

CASE REPORT

M.C.D., Negro female, age 26, Para I, came under observation Oct. 15, 1961, early in the sixth month of pregnancy. The expected date of delivery was Jan. 30. The complaint was "cramping around the navel," particularly on the left, off and on since the second month and more troublesome during the previous two weeks. The patient stated that "when the baby moves, I nearly cramp to death." She had been "constipated throughout *this* pregnancy," with frequent nausea and occasional vomiting. She had been treated for pernicious nausea and vomiting of pregnancy, pyelitis of pregnancy, and threatened abortion. There had been no dysuria, rigors, fever, or vaginal bleeding.

On physical examination the patient was afebrile, normocardiac, and normotensive. The fundus was located 4 cm. above the umbilicus and was noted to be wide and horizontal.

Obesity obscured and precluded more adequate findings. The urinalysis and VDRL were negative. The blood was Type O, RH positive.

CLINICAL COURSE

The abdominal pain was apparently relieved by a single large dose of progesterone, and the patient was returned to the referring physician with a tentative diagnosis of deficiency of this hormone. After three weeks of intensive therapy, there seemed to develop a tolerance to this drug. A change was made to stilbestrol, which was effective for a short period.

During this stage, an overwhelming infestation of *Trichomonas vaginalis* vaginitis, and a bout with influenzal atypical pneumonitis were somewhat distracting. The fetal heart sounds were audible from time to time in all quadrants and were heard last on Dec. 2.

There was no further observation until Jan. 2, when the patient reported to the family physician she had had no cramping since about Dec. 1 and no fetal movement since Dec. 15. The breasts had become distended about Dec. 20. She had been nauseated one week. Inasmuch as the fetal heart sounds were not audible, and the fundus was 5 cm. lower than the month before, a diagnosis of missed abortion was made.

HOSPITAL COURSE

A series of minim doses of an oxytocic agent were unsuccessful at stimulating uterine contractions, as was a slow intravenous drip of the same. Lack of palpable contractions was inadequately evaluated.

X-ray pelvimetry on Jan. 2 revealed no feto-pelvic disproportion, an apparently intra-uterine fetus with footling breech presentation, and no definite signs of fetal death.

During January, there were two "false labors," and the patient was judged to have a low pain threshold. Rectal examinations revealed an undilated cervix with presenting part not palpable. A small amount of vaginal bleeding occurred at this time.

On Jan. 24, x-ray pelvimetry revealed an apparently intra-uterine fetus in transverse presentation with overlapping of the fetal cranial bones and extreme thoracic kyphosis, two of the cardinal signs of intra-uterine death. As there were only minor toxic symptoms, a conservative regimen was adhered to.

On Feb. 12, the patient was admitted to the hospital for abdominal laparotomy, presumably cesarean section.

At surgery, the peritoneum was grayish in color and edematous, and upon opening the lower



Figure 1. Fetus showing maceration and collapse of the calvaria.

abdominal incision, the fetal arm presented. The fetus, free within the peritoneal cavity, was removed by breech extraction. It was nonviable and macerated, with collapse of the calvaria. The umbilical cord was yellow-gray in color and was divided in its mid-portion as if tied with a fine suture. It is believed that this coarctation precluded the possibility of a viable fetus.

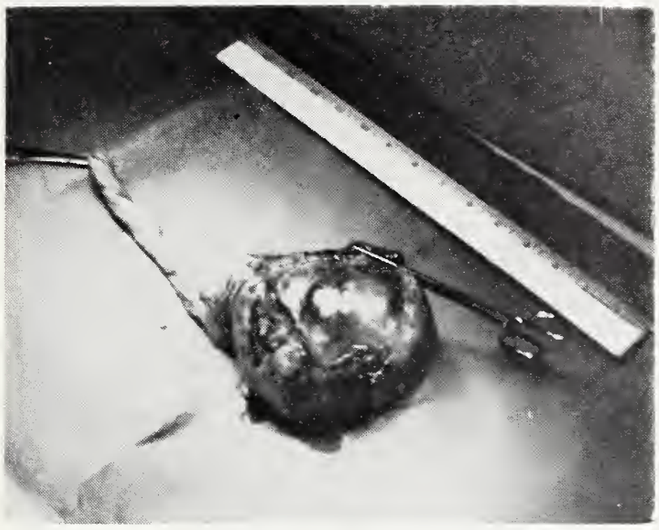


Figure 2. Placenta and fimbriated tube.

The proximal end of the cord arose from the placenta attached within the left fallopian tube at the fimbriated end, facilitating high-ligation of the tube with no loss of blood. There was great dilatation of the vessels of broad ligament and mesosalpinx, providing adequate blood supply to the placenta, yet encased in the dilated fimbria and infundibulum of the tube. A smaller amount of amniotic fluid than usual was found, and there were only remnants of membranes hanging from the placenta, which, together with the fimbriated tube, assumed the shape of a nearly round ball.

DIAGNOSIS

Multiple sections revealed degenerative changes in the placenta extending throughout the cord, with coarctation and discission of the cord.

The diagnosis was intra-abdominal pregnancy at seven and one-half months with death of the fetus due to coarctation of the cord.

It may be assumed that nidation occurred so near the fimbriated end of the tube that as the pregnancy grew in the direction of least resistance, it extruded through the end of the tube. The membranes remained intact until late in pregnancy, rupturing at or near the time of death of the fetus. There were no peritoneal adhesions.

The postoperative course was not remarkable.

★★★

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EQUINE EQUANIMITY

"Last week," said the trainer of questionable sportsmanship, "I gave my horse a big shot of amphetamine and a grain of morphine just before the feature handicap."

"Gosh," retorted his companion, "did he win?"

"No," sighed the trainer, "but he was the happiest horse in the race."

Radiologic Seminar XII: Basilar Linear Atelectasis

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LINEAR TRANSVERSE strands of increased density at the lung bases (Figures 1 and 2) may be observed on chest radiographs in a variety of clinical conditions. These are often rather transitory in nature with their pattern varying from day to day. Fleischner, in an extensive postmortem study, explored their atelectatic nature. They were found to vary from thin lines to five millimeters in thickness and were usually located in the lower one-third of the lung. Such densities may be single or multiple, unilateral or bilateral.

Decreased respiratory exchange, permitting terminal bronchi to become plugged by secretions, appears to represent the underlying process responsible for the development of these linear atelectatic changes. Immediately adjacent pathology, such as chest wall trauma, pleuropulmonary lesions, or myocardial infarction may be the initiating factor. Voluntary limitation of the depth of respiration secondary to the pain of rib fractures, for example, is frequently followed by the development of linear atelectasis (Figure 3). Intra-abdominal pathology, especially that associated with elevation or immobilization of the diaphragm, may limit respiratory exchange at the lung bases. Occasionally in this situation the demonstration of linear atelectasis may be the first clue as to the presence of a disease process beneath the diaphragm, and if the atelectatic changes are unilateral, this may be of help in localizing the abdominal pathology.

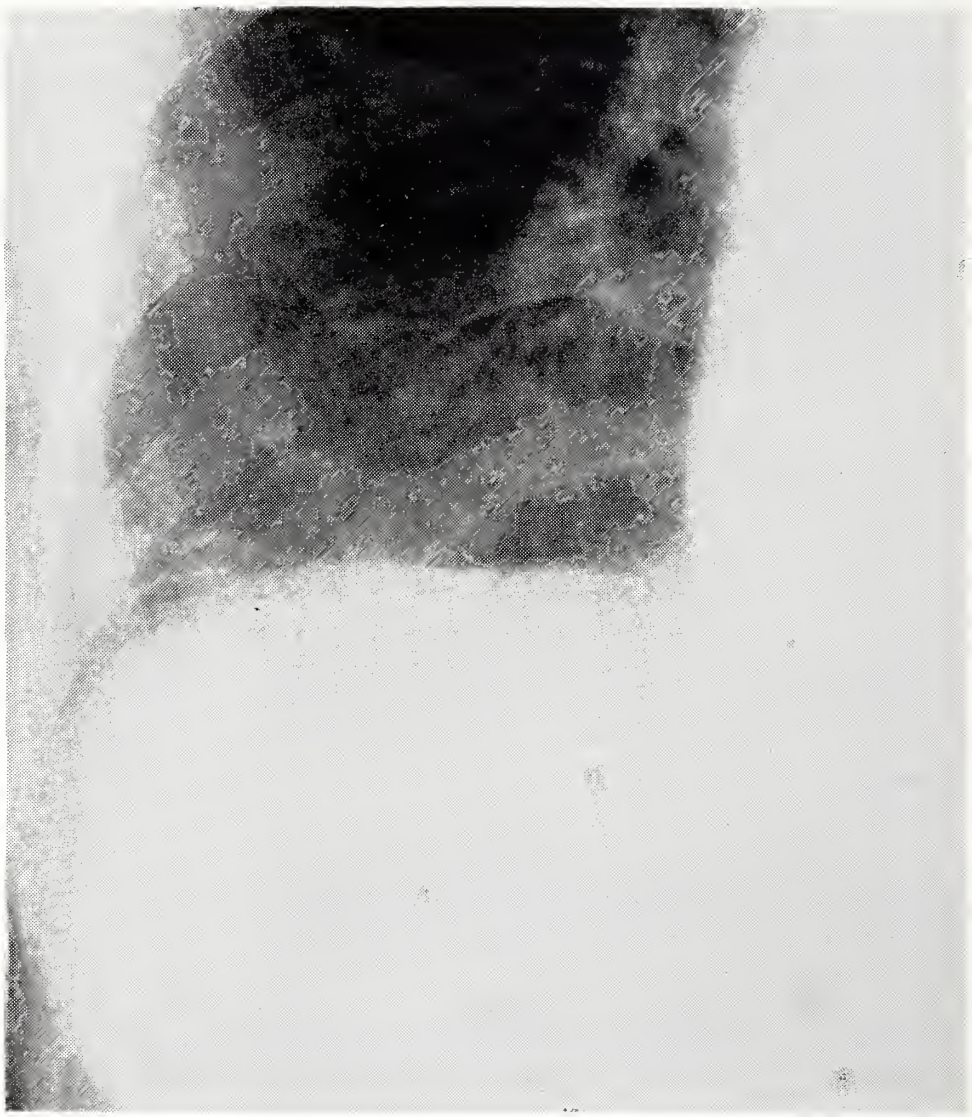


Figure 1. View of base of right lung, demonstrating classical appearance of so-called basilar linear atelectasis, appearing as transverse bands of increased density just above the diaphragm.

Clinical conditions producing enforced immobilization of an individual, such as cerebral vascular accidents or fractured hips, may be accompanied by linear atelectasis, and it is also

Sponsored by the Mississippi Radiological Society.



Figure 2. Radiograph demonstrating bilateral basilar linear atelectatic changes.



Figure 3. Linear atelectasis associated with rib fractures. Voluntary limitation of respiratory excursions, due to pain, is one of the initiating factors in this situation.

The April Radiologic Seminar marks the one year point in Journal MSMA's monthly series. The seminar is formally sponsored as a postgraduate education project of the Mississippi Radiological Society and is prepared each month by individual members of the society. In Journal MSMA's recent statewide readership survey, the Radiologic Seminar rated highly with 14 of the 16 component medical societies approving it by 90 per cent or more. Eight local societies showed 100 per cent approval of the feature.

common in the postoperative period.

Synonyms for linear atelectasis include focal, plate-like or discoid atelectasis, as well as Fleischner's lines. The differential diagnosis includes pulmonary infarcts, which are usually shorter and broader in shape and are frequently accompanied by a pleural reaction. Fibrotic scars from any previous lung pathology do not change their pattern, while linear atelectasis is not constant and usually clears completely. Kerley B or septal lines, classically secondary to mitral stenosis and chronic pulmonary venous congestion, tend to be much finer and shorter in length. ★★★

Singing River Hospital

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Clinicopathological Conference XXXIX

Conducted by the Department of Pathology
Mississippi Baptist Hospital
Jackson, Mississippi

The patient in CPC XXXIX was first admitted to the Baptist Hospital on June 4, 1956, at the age of 17 months. At this time she was found to have fluid in the left pleural cavity. This fluid was removed, and a month later a mass showed up in the posterior portion of the left chest. A biopsy was made of this mass and the patient was given x-ray therapy. Six years later the tumor recurred and was removed by surgical excision on Aug. 16, 1962. To date the child is alive and well.

Discussers are Drs. James P. Spell, James M. Packer, and J. Harvey Johnston. Dr. Kenneth M. Heard gives the pathological report.

THIS PATIENT was 17 months old when first admitted to the Baptist Hospital on June 4, 1956. At this time the chief complaint was fever. She had had daily temperature rises for nine days. There had been repeated bouts of fever for about five weeks and some vomiting during the four days prior to admission. The patient had been treated with antibiotics. There had been some suspicion of polio because of pain in the right leg.

On admission to the Baptist Hospital, physical examination showed a red throat and a low white count. The patient's temperature was 100.6. She appeared acutely ill and highly irritable and was apparently in discomfort. There were decreased palpable voice transmission and dullness to percussion in the left base. The abdomen showed gaseous distention, particularly on the left. There were no palpable masses. Chest x-ray showed findings suggestive of fluid in the left chest. There was no apparent displacement of the heart and mediastinum indicating that probably some atelectasis was present. Displacement of gas shadows of the left bowel downward was also noted.

The admission laboratory work showed a total white count of 17,750 with a differential of 6 per cent band cells, 49 per cent segmented neutrophils, 3 per cent eosinophils, 1 basophil, 44 lymphocytes, and 2 monocytes. The urinalysis was negative.

On the evening of June 4, 1956, about 80 cc. of thin, blood-tinged fluid was removed by thoracocentesis from the 6th intercostal space in the left posterior axillary line. Cultures of this fluid were negative. Skin tests for histoplasmosis and tuberculosis were negative. By June 17, the chest x-ray showed clearing of the changes in the left lung field and absorption of fluid with fairly good expansion of the left lung. There was some evidence of residual fluid and pleural reaction. The child was discharged from the hospital on June 18.

On July 5, 1956, the child was admitted as an outpatient for a follow-up x-ray. The film showed that no further accumulation of fluid had occurred on the left. The left lung was grossly clear as was the right. However, there was a small amount of fluid on the left. There was some increase of density, which was not previously present, extending out from the left border of the heart. This finding brought up the possibility of a mass being present in the left side of the chest, located posteriorly. It was thought that there was thinning or erosion of the posterior aspects of the left 8th through 12th ribs. Because of this, it was felt that strong consideration should be given to the possibility of a malignant tumor mass. Skeletal survey done following admission to the hospital showed no evidence of metastatic malignant disease.

The patient was admitted to the hospital on July 5. The chart on this admission is rather scanty. The chief complaint was listed as "mass." Evidently a mass had become palpable on the left side, although it is not described in detail. Also it

was noted that x-ray showed some posterior thinning of the 8th, 9th, and 10th ribs. On July 6, an operation was performed consisting of a biopsy of the left chest wall. The operative findings stated only "grayish-yellow tumor invading left chest wall encountered." It apparently was rather extensive, but no more detailed description is available on the operative chart. Following the operation the child was given x-ray therapy.

The patient was x-rayed again as an outpatient on Oct. 1, 1956. At this time satisfactory resolution of the mass of the left hemithorax was noted. There was some residual density, but it was felt that this might be entirely due to pleural thickening, although residual tumor could not be excluded.

Follow-up films on Jan. 2, 1957, showed further clearing with no evidence of residual tumor or recurrence. Other negative follow-ups were recorded in July 1957, 1958, and February 1959.

Through 1960 and 1961 the disease continued to appear quiescent although there was some persistence of posterior pleural density on the left. Films recorded on July 31, 1962, showed increased thickening of the pleura on the left posteriorly in comparison with previous films. Actually there appeared to have been a mild increase in this mass since about early 1961, but the amount of enlargement had been quite slow. In association with the rib erosion, this was interpreted as evidence of activity. The child was admitted to the hospital on Aug. 16, 1962. At this time an extensive resection of the left lower chest wall including portions of the 8th, 9th, 10th, 11th, and 12th ribs was carried out. There was intimate attachment to the bodies of the vertebrae requiring removal by sharp dissection.

DISCUSSION

Dr. James P. Spell: "Those of you who have read the protocol can see that it is the story of an infant who has a neurogenic tumor of some type. I shall briefly give the gist of the protocol for those who have not had a chance to read it and then we will consider some specific points.

"The story covers about six years of the child's life. It begins when the child was 17 months of age, and she was discovered to have fluid in the left pleural cavity. This fluid was removed, and a month or two later a mass showed up in the posterior portion of the left chest. A biopsy was made of this mass, and presumably a diagnosis of malignancy was made. The patient was given x-ray therapy to the tumor and then was apparently well for five years. After this time the tumor recurred, and it was removed by surgical excision. This operation was performed on Aug. 16, 1962, and so far as we know, the patient is living and well now.

"Before discussing specific points in the protocol, I would like to make a couple of general statements about tumors in children. According to the latest Public Health Service statistics, cancer in childhood is on the increase. Cancer is the third most frequent cause of death in children ranging from one to four years of age. It is the second most frequent cause in children from the ages of four to thirteen years. Cancer is second only to accidental death in this latter group.

REVIEW OF LITERATURE

"There are two books which helped me a great deal in preparing my discussion for this case, and I can heartily recommend them to you as excellent references on tumors in childhood. The first one is *Cancer and Allied Diseases of Children and Infants* which was edited by Irving M. Ariel and George T. Pack.[1] The other reference is entitled *Tumors of Childhood* and is was written by Harold P. Dargeon, head of the Pediatric Section of Sloan-Kettering Institute in New York.[2]

"Now let us consider a few specific points about this case. The patient was first seen in 1956 when she was 17 months of age. At that time the primary complaints were pain in the right leg and fever. These are common complaints in childhood, and no particular significance can be attached to them. An x-ray made at that time revealed a little fluid in the left pleural cavity without any apparent displacement of the heart and mediastinum. Do we have the initial films?"

Dr. James M. Packer: "Yes."

Dr. Spell: "They are dated June 4, I believe. Will you please describe the findings?"

Dr. Packer: "That's the date of the first film. Actually there were several taken on that same day, but about all we could make out was an opacity in the left base which has the characteristic appearance of pleural effusion."

Dr. Spell: "This fluid was aspirated, and it was described as 80 cc. of thin, blood-tinged fluid. The cultures of this fluid are reported to have been negative. I don't know whether or not any studies were made for cell blocks."

Dr. Kenneth M. Heard: "There was no report on the chart."

Dr. Spell: "Apparently no cell blocks were made. The later evolvement of this story, however, leads us to believe that the fluid was the result of neoplastic invasion at this time. The patient went for about a month without any reaccumulation of fluid. Two months after the fluid was withdrawn, however, a chest x-ray was re-

ported as follows: 'Increase of density not previously present which extended out from the left border of the heart. This brings up the possibility of a mass being located posteriorly in the left side of the chest.'

"Practically everyone associates posterior neoplastic lesions with neurogenic tumors. I am quite familiar with the various types of posterior mediastinal tumors, and this was my first impression. Subsequent x-ray reports, however, did not indicate that this was a tumor of the mediastinum. A later x-ray film indicated that the mass was located posteriorly in the region of the 8th, 9th, and 10th ribs which made me more suspicious of a tumor in the retroperitoneal space or the adrenal gland. A skeletal survey was done at this time, and it revealed no evidence of metastatic malignant disease.

"The child was admitted to the hospital, and an operation was performed. The only information about this operation that we are given is that a biopsy was done, and the findings were that of a 'grayish-yellow tumor involving the left chest wall.' We are not given a clear description of the tumor, but I assume that it was located in the area indicated by the x-rays."

Dr. Heard: "Dr. Johnston, can you elaborate on the operative findings?"

Dr. J. Harvey Johnston: "It appeared to be a malignant tumor. I thought I could see rib invasion. We just did a biopsy of muscle which had tumor in it from the intercostal space."

DISCUSSER'S DIAGNOSIS

Dr. Spell: "Thank you. Of course we don't have the pathologic report of this tumor. Following the operation, however, the child was given x-ray therapy, and this indicates to me that this was a malignant tumor. With this information in hand, I went down the check list of various types of malignancy in infancy, and the incidence in which they occur. There are five tumor groups which include most of the malignancies of infancy and childhood. The most prevalent type of cancer seen in children is the lymphoma group. This includes leukemia, Hodgkin's disease, and other malignancies of the blood-forming organs. The second most common type, and the one that is most often seen by the surgeon, is the neuroblastoma group of tumors. The third most common type is bone tumors, then sarcomas and tumors of the central nervous system stand in fourth and fifth places. From this classification of tumors, this case would most likely fit into the neuroblastoma group. Here we have a child 17 months old with a posterior lesion of some kind which was treated with x-ray therapy after a biopsy had been made. This is certainly a compatible history for neuroblastoma. I, therefore, made a presumptive diagnosis of neuroblastoma, but later developments in this history made me have grave misgivings about this diagnosis.

"A most significant factor in this history is that the patient was presumably alive and well at least six years after the diagnosis of malignancy. As of 1951 only 47 five-year survivors among patients with neuroblastoma had been reported. Therefore, if this patient has lived six years with neuroblastoma, this case ought to be reported.

"Another discrepancy in my diagnostic theory is the fact that surgery was performed when the tumor recurred, rather than relying again upon x-ray therapy for treatment. I feel that my diagnosis of neuroblastoma is quite uncertain and will require considerable modification.

"Among other diagnostic possibilities, an adrenal tumor is most outstanding. The adrenal medulla is probably the most frequent site of origin of neuroblastomas. Besides neuroblastoma, there are the pheochromocytomas and the adrenal cortical carcinomas. This could be one of these. They do not seem likely, however. One statement in the protocol did give me another diagnostic lead. It was stated that there was intimate attachment of the tumor to the bodies of the vertebrae which required removal by sharp dissection. This makes me wonder whether or not the tumor might have arisen from the sympathetic chain.

"Tumors of the sympathetic system are not common, but they do occur with significant frequency. These tumors may be benign or malignant. The malignant form is the neuroblastoma, which is the same type as the neuroblastoma arising from other sites in the body. The benign type of sympathetic tumor is called ganglioneuroma. Dr. Heard will discuss the pathologic picture of this tumor in detail. Simply stated, the neuroblastoma is composed of very poorly differentiated cells while the ganglioneuroma exhibits a high degree of cellular differentiation. The tumor we are given in this CPC seems to be compatible with a tumor of the sympathetic ganglia located either in the lower chest or the upper abdomen. I still believe the diagnosis is a neuroblastoma, but I cannot explain this patient's unlikely survival for six years, nor the fact that the tumor was later resected and apparently was cured.

"I have checked briefly in the bulletins put out by the Armed Forces Institute of Pathology, and I found a few appropriate references. Apparently, a few reports have been given of neuroblastoma which spontaeously 'matured' into the benign le-

sion of ganglioneuroma. I know, personally, of a case at the University Hospital here in Jackson where the diagnosis had been made of metastatic neuroblastoma to the spinal column in a child. The parents were given a very grave prognosis and told to bring the child back for periodic examinations. The child has been coming back for several years now without any evidence of progression of the disease, so I wonder if this may not have been a case of spontaneous maturation of neuroblastoma into neuroganglioma. Also I am personally acquainted with a man in New York City who was operated on at the age of two years and the diagnosis made of neuroblastoma. He had recurrence of the tumor at age 10 years and was operated on at this time by Dr. Harvey Cushing. The diagnosis at second operation was ganglioneuroma, and this patient is living and well at the age of 53 years. So the protocol at hand may represent an instance of spontaneous metamorphosis from a malignant to a benign tumor.

"In summary, I believe this patient originally had a neuroblastoma and that later her physicians had reason to believe that the tumor had assumed benign characteristics. I would explain this seemingly unlikely occurrence by one of the following three possibilities. First, perhaps the slide at the first biopsy was misread, and an erroneous diagnosis of neuroblastoma was made. This seems unlikely, however, since Dr. Heard tells me that the microscopic picture of neuroblastoma is quite definite and not easily confused. Second, I might mention the possibility of the tumor having taken on its benign characteristics as a result of the x-ray therapy. There are isolated reports in the literature where this seems to have occurred. Perhaps the radiologist can enlighten us upon this possibility. The third possibility, and the one which I believe is most appropriate, is that this tumor represents one of those rare instances where a malignant neuroblastoma spontaneously matured into the benign, well-differentiated ganglioneuroma. These impressions are speculative, however, and they may be not at all appropriate. If I had to make one diagnosis from this protocol, it would be neuroblastoma with recurrence after six years."

PATHOLOGIST'S REPORT

Dr. Heard: "The operation performed was an extensive resection of the chest wall including portions of the 8th, 9th, 10th, 11th, and 12th ribs. This was done after a frozen section diagnosis of ganglioneuroma. The tumor replaced the intercostal tissue but apparently did not invade the ribs. There was some accessory tissue submitted which presumably had been removed from along the thoracic vertebra. We made numerous sections on this material to see if any residual undifferentiated tumor was present and every section showed

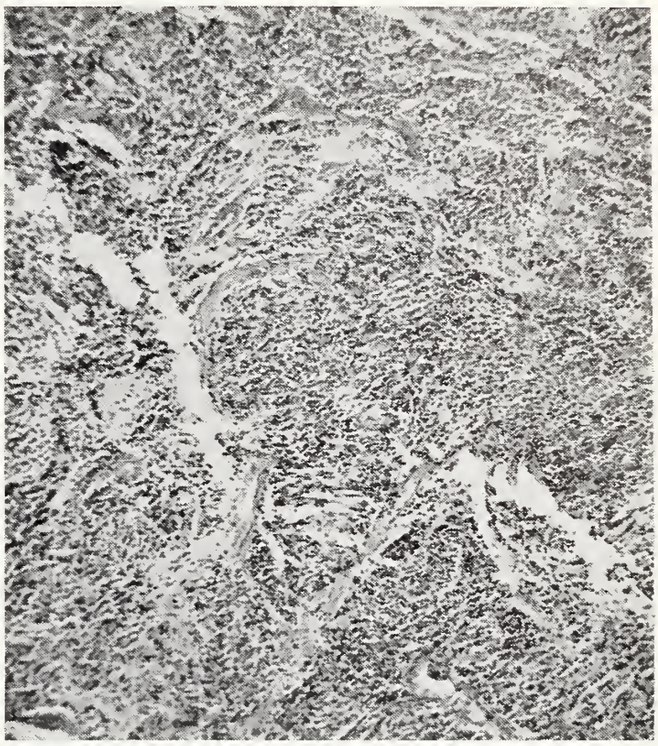


Figure 1. Highly cellular, undifferentiated neuroblastoma (1956).

complete differentiation into a ganglioneuroma, with the presence of definite ganglion cells scattered throughout a haphazard nerve tissue stroma. The original sections, of course, were reviewed

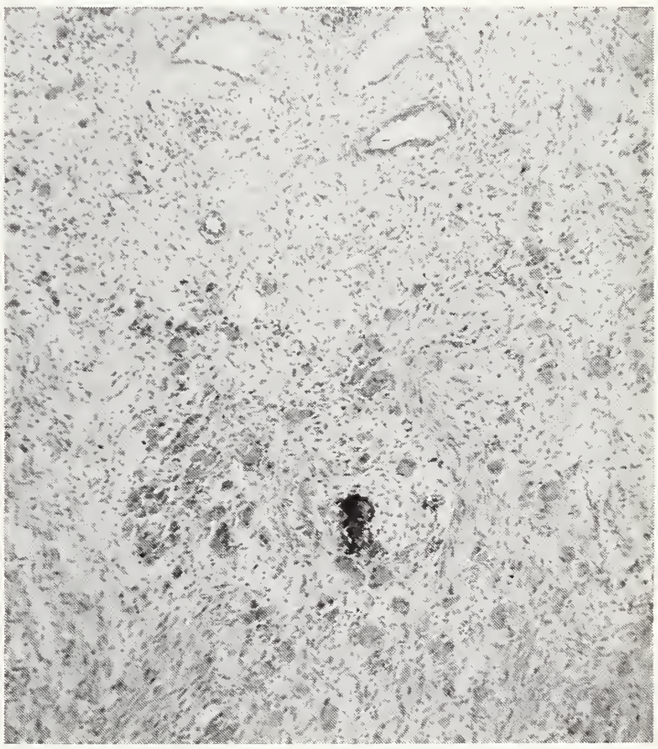


Figure 2. Well-differentiated ganglioneuroma (1962).

and there is no real argument as to the original diagnosis of neuroblastoma. It appeared as a highly undifferentiated, highly cellular tumor. I certainly cannot settle the argument as to whether the differentiation occurred as a result of x-ray therapy or whether it occurred spontaneously. However, it appears that most cases in which this differentiation has occurred have had x-ray therapy.

Our final diagnosis was that the patient originally had a neuroblastoma which differentiated into ganglioneuroma. ★★★

1190 North State St.

REFERENCES

1. Ariel, Irving M., and Pack, George T.: Cancer and Allied Diseases of Children and Infants, Boston, Little, Brown and Company, 1960.
2. Dargeon, Harold P.: Tumors of Childhood, New York, Paul B. Hoeber, Inc., 1960.

LOWER MATHEMATICS

A well-known design engineer called his family physician who caught a note of anxiety in the worried voice:

"Please hurry over, doctor," he urged. "My son has just swallowed my slide rule."

"That's serious," replied the physician, "I'll be right there but first, tell me what you are doing in the meanwhile."

"Using logarithm tables, of course."

95th Annual Session

Mississippi State Medical Association

Biloxi, May 13-16, 1963

MISSISSIPPI'S SUN-DRENCHED VACATIONLAND, the Gulf Coast, will welcome the 95th Annual Session of the association which, with concurrent events and meetings, will offer four days of intensive postgraduate education opportunity to physicians. Another important annual session first will be a Seminar on Medicine and Religion on May 15 when four nationally known clergymen and a physician church leader will appear before a general meeting. The association's policy-making body, the House of Delegates will meet on May 13 as the initial activity and again on May 16, the concluding conclave.

The Woman's Auxiliary will conduct its 40th Annual Session on May 14 with pre-convention activities set for the preceding day. The Scientific Assembly of the association, consisting of the seven formal sections and the seminar, will extend over the period May 14-16. All major association and Auxiliary activities will center around the headquarters at the Buena Vista, Biloxi.

Dr. C. P. Crenshaw, Collins, president, will address the House on May 13 and the president-elect, Dr. John G. Archer, Greenville, will be inaugurated as 1963-64 association head on May 16 at the concluding meeting. Dr. C. G. Sutherland, Jackson, is chairman of the Scientific Assembly.

More than 50 speakers will appear before the Scientific Assembly, Seminar on Medicine and Religion, Auxiliary, and various concurrent meetings. Special guest speakers include Dr. George M. Fister, Ogden, Utah, president of the American Medical Association, and Mrs. William G. Thuss, Birmingham, president of the Woman's Auxiliary to AMA.

Medical alumni reunions and dinners share the fellowship spotlight with specialty society occasions on Monday and Tuesday evenings. The annual association banquet and dance is set for Wednesday evening. On the recreational side, the golf tournament will be conducted May 15.

Scientific and technical exhibits will be presented at the renovated and enlarged Buena Vista, adjacent to scientific and business meetings. Other nearby Coast hotels are cooperating in the activities of the session, furnishing meeting rooms and housing for registrants.

Hotel reservations may be obtained from the hotel of individual preference or through Mr. Chris Thygesen, Resident Manager, the Buena Vista Beach Hotel and Motel, Biloxi.

OFFICIAL CALL

To all members of the Mississippi State Medical Association:

The 95th Annual Session of the Mississippi State Medical Association is called to meet at Biloxi, Mississippi, on Monday, May 13, 1963, pursuant to Article V of the constitution. The House of Delegates will be convened at 1:30 o'clock p.m. at the Buena Vista.

The Scientific Assembly, consisting of the seven sections and the Seminar on Medicine and Religion, will meet during the period May 14-16, 1963.

No member or guest will be permitted to participate in any aspect of the annual session until regularly registered.

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PRESIDENT
C. G. SUTHERLAND
SECRETARY-TREASURER

STATE OFFICERS 1962-63



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1914-1915 J. S. Ullman, M.D., Natchez
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1935-1936 J. R. Hill, M.D., Corinth
1936-1937 Harvey F. Garrison, M.D., Jackson
1940-1941 William H. Anderson, M.D., Booneville
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1944-1945 B. L. Crawford, M.D., Tylertown
1946-1947 J. K. Avent, Sr., M.D., Grenada
1948-1949 R. B. Caldwell, M.D., Baldwyn
1949-1950 B. B. O'Mara, M.D., Biloxi
1950-1951 B. S. Guyton, M.D., Oxford
1951-1952 James Grant Thompson, M.D., Jackson
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1956-1957 H. C. Ricks, M.D., Jackson
1957-1958 Howard A. Nelson, M.D., Greenwood
1958-1959 Guy T. Vise, M.D., Meridian
1959-1960 Stanley A. Hill, M.D., Corinth
1960-1961 G. Swink Hicks, M.D., Natchez
1961-1962 Lawrence W. Long, M.D., Jackson

OPEN SESSIONS, HOUSE OF DELEGATES

All members, guests, and Auxiliary members are invited to attend the open sessions of the House of Delegates, the first beginning at about 3:30 p.m., Monday, May 13, 1963, in the Buena Vista, Lotus Mezzanine.

Address of the President
C. P. Crenshaw, Collins
Thursday, May 16, 1963:
Special Address
George M. Fister, Ogden, Utah, President, American Medical Association

ACTIVITIES CALENDAR

REGISTRATION

General registration for the House of Delegates and the Scientific Assembly will be located in the Hurricane Foyer, the Buena Vista. No person will be admitted to any activity of the Annual Session without first registering. The Secretary's Office will be located in Rooms 142-144, the Buena Vista. Hours of registration are: May 13, 9:00 a.m. to 5:00 p.m.; May 14 and 15, 8:00 a.m. to 5:00 p.m.; May 16, 8:00 a.m. to 1:30 p.m.

MONDAY, MAY 13, 1963

9:00 a.m. Miss. Association of Pathologists, Buena Vista, Fiesta Room
9:30 a.m. Miss. Commission on Hospital Care, Buena Vista, Card Room
12:30 p.m. American College of Surgeons Luncheon, Buena Vista Beach Motel, Poolside Room
1:30 p.m. House of Delegates, Buena Vista, Lotus Mezzanine
3:30 p.m. Woman's Auxiliary, Preconvention Executive Board, Buena Vista, Card Room
4:30 p.m. University of Mississippi Medical Alumni, Business Meeting, Buena Vista, Sky Lounge
6:00 p.m. Miss. Association of Pathologists, Fellowship Hour and Banquet, Buena Vista, Sun Room
6:30 p.m. University of Mississippi Medical Alumni, Fellowship Hour and Seafood Jamboree, Buena Vista, Sky Lounge and Deck

TUESDAY, MAY 14, 1963

7:30 a.m. Woman's Auxiliary, Continental Breakfast, All Auxiliary Members, Buena Vista, Lotus Mezzanine
8:30 a.m. Woman's Auxiliary, General Session, Buena Vista, Lotus Mezzanine
9:00 a.m. Section on Medicine, Buena Vista, Hurricane Room E
10:00 a.m. Reference Committee on Reports of Officers and Board of Trustees, Buena Vista, Sun Room
12:00 noon Miss. Society of Internal Medicine Luncheon, Buena Vista, Lotus Room Center
12:00 noon Miss. Chapter, American Academy of Pediatrics Luncheon and Meeting, Buena Vista, Fiesta Room
12:00 noon Miss. Orthopaedic Society Luncheon, White House, Sun Room
12:30 p.m. Woman's Auxiliary Luncheon, Broadwater Beach Hotel
12:30 p.m. International College of Surgeons Luncheon, Buena Vista Beach Motel, Poolside Room
12:30 p.m. Fifty Year Club Luncheon, Buena Vista, Card Room
2:00 p.m. Section on Surgery, Buena Vista, Hurricane Room E
2:00 p.m. Section on Preventive Medicine, Buena Vista, Lotus Room South

2:00 p.m. Reference Committee on Medical Practices, Buena Vista, Sun Room
2:00 p.m. Council on Constitution and By-Laws, Buena Vista, Card Room
6:30 p.m. University of Tennessee Medical Alumni, Fellowship Hour and Banquet, Buena Vista, Lotus Mezzanine
6:30 p.m. Miss. Chapter, American Academy of Pediatrics, Fellowship Hour and Banquet, Buena Vista, Lotus Room South
6:30 p.m. University of Mississippi Class of '29 Reunion, Fellowship Hour and Banquet, White House, Sun Room
6:30 p.m. University of Mississippi Class of '36 Reunion, Fellowship Hour and Banquet, White House, Magnolia Room
6:30 p.m. University of Mississippi Class of '41 Reunion, Fellowship Hour and Banquet, Buena Vista, Card Room
6:30 p.m. University of Mississippi Class of '47 Reunion, Fellowship Hour and Banquet, Buena Vista, Fiesta Room
6:30 p.m. University of Mississippi Class of '48 Reunion, Fellowship Hour and Banquet, Buena Vista, Hurricane Room E
6:30 p.m. University of Mississippi Class of '50 Reunion, Fellowship Hour and Banquet, Buena Vista, Deck
6:30 p.m. University of Mississippi Class of '51 Reunion, Fellowship Hour and Banquet, Buena Vista, Sky Lounge
7:00 p.m. The Tulane University Medical Alumni, Banquet, Buena Vista, Sun Room

WEDNESDAY, MAY 15, 1963

7:30 a.m. Past Presidents' Breakfast, MSMA, Buena Vista Beach Motel, Poolside Room
8:00 a.m. Past President's Breakfast, Woman's Auxiliary, Buena Vista, Sun Room
9:00 a.m. Seminar on Medicine and Religion, Buena Vista, Lotus Room North, Center, and South
11:30 a.m. Miss. Ob-Gyn Society, Fellowship Hour and Luncheon, Buena Vista, Sun Room
12:00 noon Flying Physicians Association Luncheon, White House, Sun Room
2:00 p.m. Section on Obstetrics and Gynecology, Buena Vista, Hurricane Room E
2:00 p.m. Section on Pediatrics, Buena Vista, Lotus Mezzanine
2:00 p.m. Miss. EENT Association Meeting, White House, Magnolia Room
2:00 p.m. Nominating Committee, MSMA, Open Session, Buena Vista, Fiesta Room
2:00 p.m. Reference Committee on Miscellaneous Business, Buena Vista, Card Room
3:00 p.m. Woman's Auxiliary Tea, The Old Brick House
6:30 p.m. MSMA Fellowship Hour, All Members and Guests, Buena Vista, Lotus Mezzanine
7:30 p.m. Annual Association Banquet-Dance, Buena Vista, Lotus Room North, Center, and South

ACTIVITIES CALENDAR

THURSDAY, MAY 16, 1963

7:30 a.m. Southern Medical Association Breakfast, Buena Vista, Sun Room (By Invitation)

9:00 a.m. Section on General Practice, Buena Vista, Hurricane Room E

9:00 a.m. Section on EENT, Buena Vista, Fiesta Room

12:00 noon Miss. Academy of General Practice Luncheon, Buena Vista, Lotus Room South

12:30 p.m. Section on EENT Luncheon, Buena Vista, Sun Room

1:30 p.m. House of Delegates, Buena Vista, Lotus Mezzanine

GOLF TOURNAMENT

The annual MSMA golf tournament will be held on May 15 at the Great Southern Country Club. Dr. B. B. O'Mara, tournament chairman, will furnish details to interested members.

MISSISSIPPI SOCIETY OF ANESTHESIOLOGISTS

Members of the Mississippi Society of Anesthesiologists invite all association members to their annual meeting at Jackson on May 5, 1963, the Jackson Country Club, beginning at 7:00 p.m. The speaker will be Dr. Frederick Van Bergen, professor of anesthesiology, University of Minnesota, whose title is "Theoretical and Practical Aspects of Controlled Ventilation." The business session will include election of officers and the delegate and alternate delegate to the American Society of Anesthesiologists. Officers are Drs. Happy L. Gee, president; Marion Carnes, vice president; and Curtis W. Caine, secretary, all of Jackson.

MISSISSIPPI COMMISSION ON HOSPITAL CARE

Members of the Mississippi Commission on Hospital Care will meet on Monday, May 13, 1963, in the Card Room, Buena Vista, at 9:30 a.m. Additional information will be supplied by Mr. Foster L. Fowler, Jackson, executive director of the commission.

EXECUTIVE BUSINESS

HOUSE OF DELEGATES

Monday, May 13, 1963
1:30 p.m.

The Buena Vista
Lotus Mezzanine

B. B. O'Mara,
Biloxi, Speaker

Howard A. Nelson,
Greenwood, Vice Speaker



DR. O'MARA



DR. NELSON

MEETINGS OF THE HOUSE

The meeting will be opened by the President and the Speaker, in presiding over the House, will announce the order of business. The adjourned meeting will be opened at 1:30 p.m., Thursday, May 16, 1963, in the Lotus Mezzanine. All meetings of the House will be held at the Buena Vista.

REFERENCE COMMITTEES

Reports, resolutions, and other business coming before the House will ordinarily be referred to a reference committee by the Speaker or Vice Speaker for hearing and recommendation. Any member of the association may appear before a reference committee on any matter being considered. Reference committees are scheduled to meet at the Buena Vista at the times and places shown.

Reports of Officers and Board of Trustees, Tuesday, May 14, 1963, Sun Room, 10:00 a.m.

Medical Practices, Tuesday, May 14, 1963, Sun Room, 2:00 p.m.

Constitution and By-Laws (Council), Tuesday, May 14, 1963, Card Room, 2:00 p.m.

Miscellaneous Business, Wednesday, May 15, 1963, Card Room, 2:00 p.m.

Nominating Committee, Open Session, Wednesday, May 15, 1963, Fiesta Room, 2:00 p.m.

THE SCIENTIFIC ASSEMBLY



DR. SUTHERLAND

COUNCIL ON SCIENTIFIC ASSEMBLY

C. G. SUTHERLAND, M.D., CHAIRMAN

THE SCIENTIFIC EXHIBIT

HURRICANE ROOM D
THE BUENA VISTA

THE TECHNICAL EXHIBIT

HURRICANE ROOMS A, B, AND C
THE BUENA VISTA

SCIENTIFIC SECTIONS

EYE, EAR, NOSE AND THROAT
MEDICINE
OBSTETRICS AND GYNECOLOGY
PEDIATRICS
PREVENTIVE MEDICINE
SURGERY
GENERAL PRACTICE
THE BUENA VISTA

CONDUCT OF THE SCIENTIFIC ASSEMBLY

The order of exercise, papers, and discussions as set forth in the official program shall be followed until completion. When the program of a section is not completed in the time alloted, it shall not be permitted to continue into that assigned to another section. No paper or address shall occupy more than 20 minutes, except those of the President, Orator, and guests. In formal discussion, no one shall speak more than five minutes, and in informal discussion, no one shall speak more than three minutes and not more than one time. All papers read before the association shall become its property. Each paper must be read by its author and deposited with the Secretary (or Chairman of the Section) when read.

THE SCIENTIFIC EXHIBIT

Physicians, foundations, and organizations will present the Scientific Exhibit. Physician-members of the Mississippi State Medical Association are eligible for the Scientific Achievement Award for excellence in scientific work. Guest exhibitors, foundations, and organizations do not participate for the award but may receive recognition for outstanding presentations. The Scientific Exhibit is located in Hurricane Room D, the Buena Vista.

EXHIBITORS

"Thoracic Trauma"
William R. Fain, M.D.; J. Harold Conn, M.D.; James D. Hardy, M.D.; and Rush E. Netterville, M.D., Jackson

"Problems of Facial Repairs"
Jesse T. Davis, M.D., Corinth

"Treatment of Duodenal Ulcers With Gastric Freezing"
Curtis P. Artz, M.D.; C. Thomas Fitts, M.D.; and John McFarland, M.B., Ch.B., Jackson

"Internal Obstruction Resulting from Localized Peritonitis"
William O. Barnett, M.D., and Richard L. Yelverton, M.D., Jackson

"Radioactive Isotope Encephalograms"
Jack K. Goodrich, M.D.; Forrest T. Tutor, M.D.; and Charles L. Webster, Jr., M.D., Jackson

"Tetanus Prophylaxis—1963"
Mississippi Committee on Trauma, American College of Surgeons

"Glaucoma Screening"
U. S. Public Health Service

"Everyday Problems in Diabetes"
American Diabetes Association

"Stroke Rehabilitation"
Mississippi Heart Association

"Splints in the Care of Patients with Arthritis"
Mississippi Arthritis and Rheumatism Foundation

THE TECHNICAL EXHIBIT

The Mississippi State Medical Association presents with pride the 1963 Technical Exhibit. Established firms engaged in the manufacture and distribution of pharmaceuticals, supplies, equipment, and in providing varied services will present exhibits. Visit each exhibit often and discuss products and services with the Professional Service Representatives. Since the association conducts its scientific activity by section meetings, continuous viewing of exhibits during off-section schedules is possible and specific reservations of time are unnecessary for physicians to visit the Technical Exhibits. Only registered members and guests are admitted. The Technical Exhibit is located in Hurricane Rooms A, B, and C, the Buena Vista.

EXHIBITORS	BOOTH
Abbott Laboratories, North Chicago, Ill.	16
A. S. Aloe Company, New Orleans, La.	20
Bedsole Surgical Supply Company, Mobile, Ala.	49-50
Ciba Pharmaceutical Products, Inc., Summit, N. J.	11
The Coca-Cola Company, Atlanta, Ga.	46
Eli Lilly and Company, Indianapolis, Ind., Scientific Sponsor (Grant)	
Encyclopaedia Britannica, Inc., New Orleans, La.	32
Geigy Pharmaceuticals, Yonkers, N. Y.	4
Great Books of the Western World, Miami, Fla.	43
IBM Corporation, Jackson, Miss	8
International Latex Corp., New York, N. Y.	42
Kay Surgical, Inc., Jackson, Miss.	45
Lanier Company, Atlanta, Ga.	25
Lederle Laboratories, Pearl River, N. Y.	13
J. A. Majors Company, Dallas, Texas	9
McNees Medical Supply Company, Jackson, Miss.	21-22
McNeil Laboratories, Fort Washington, Penn.	33
Mead Johnson Laboratories, Evansville, Ind.	1

Medco Products Company, Inc., Tulsa, Okla. 7
Merck Sharpe and Dohme, New Orleans, La. 37
Merrill, Lynch, Pierce, Fenner and Smith, Jackson, Miss. 34
Mississippi Hospital and Medical Service, Jackson, Miss. 3
Mutual Benefit Life Insurance Company, Newark, N. J. 47
National Cash Register Company, Jackson, Miss. 24
Parke, Davis and Company, Detroit, Mich. 10
Pfizer Laboratories, New York, N. Y. 26
Wm. P. Poythress and Company, Inc., Richmond, Va. 31
A. H. Robins Company, Richmond, Va. 35
Roche Laboratories, Nutley, N. J. 2
William H. Rorer, Inc., Fort Washington, Penn. 23
St. Paul Fire and Marine Insurance Co., St. Paul, Minn. 12
Sandoz Pharmaceuticals, Hanover, N. J. 44
Schering Corporation, Union, N. J. 17
G. D. Searle and Company, Chicago, Illinois 19
Southern Surgical Supply Company, Inc., New Orleans, La. 15
E. R. Squibb and Sons, New York, N. Y. 14
Stuart Company, Pasadena, Calif. 18
Upjohn Company, Kalamazoo, Mich. 5
U. S. Vitamin and Pharmaceutical Corp., New York, N. Y. 41
Warner-Chilcott Laboratories, Morris Plains, N. J. 48
W-T-S Pharmaceuticals, Rochester, N. Y. 29
Winthrop Laboratories, New York, N. Y. 6

REGISTRATION FOR EXHIBIT PRIZES

Visit the Technical Exhibits often and qualify for the drawing of attractive prizes. Obtain the necessary initials as you visit each booth. Deposit cards at Registration not later than 5:00 p.m., Wednesday, May 15.

SECTION ON MEDICINE

Tuesday, May 14, 1963
Hurricane Room E
Beginning at 9:00 a.m.

Joe S. Covington, Meridian
Chairman

James P. Holloway, Jackson
Secretary



DR. COVINGTON

MANAGEMENT OF STAPHYLOCOCCAL SEPTICEMIA AND PNEUMONIA
John H. Seabury, New Orleans, Louisiana

BASIC CONCEPTS OF ROENTGEN DIAGNOSIS
Jarrell E. Miller, Dallas, Texas

TELEPHONE TELEMETRY
Joseph P. Melvin, Jackson

STRESS POLYCYTHEMIA
Guy T. Gillespie, Jr., Jackson

ELECTION OF 1964 SECTION OFFICERS
The Chairman Presiding (Only registered members of the section may vote)

SECTION ON SURGERY

Tuesday, May 14, 1963
Hurricane Room E
Beginning at 2:00 p.m.

Joseph G. McKinnon, Hattiesburg
Chairman

Eugene A. Bush, Laurel
Secretary



DR. MCKINNON

THE DEEP GASTRIC FREEZE STORY
Curtis P. Artz, Jr., Jackson

TREATMENT OF DUODENAL ULCER BY VAGOTOMY, ANTRECTOMY AND BILROTH I ANASTOMOSIS
George H. Martin, Vicksburg

PERIPHERAL VASCULAR DISEASES
Richard H. Clark, Jr., Hattiesburg

SURGERY OF THE HAND
Daniel C. Riordan, New Orleans, Louisiana

POST THROMBO-PHLEBITIC SYNDROME
Frederick H. Bowen, Jacksonville, Florida

ELECTION OF 1964 SECTION OFFICERS
The Chairman Presiding (Only registered members of the section may vote)

SECTION ON PREVENTIVE MEDICINE



DR. RIECKEN

Tuesday, May 14, 1963
Lotus Room South
Beginning at 2:00 p.m.

William E. Riecken, Jr., Kosciusko
Chairman

THE EPIDEMIOLOGIC APPROACH TO CHRONIC DISEASES
Milton Terris, New York, New York

TUBERCULIN SKIN TESTING IN JONES COUNTY
Shelby W. Mitchell, Laurel

MISSISSIPPI'S RADIATION CONTROL PROGRAM
Mr. Robert R. Rester, Jackson

DRUG PURGATORY
Mr. Joe Q. Monaghan, Jackson

ELECTION OF 1964 SECTION OFFICERS
The Chairman Presiding (Only registered members of the section may vote)

SEMINAR ON MEDICINE AND RELIGION

Wednesday, May 15, 1963
Lotus Room North, Center, and South
Beginning at 9:00 a.m.

Howard A. Nelson, Greenwood
Presiding

I

C. P. Crenshaw, Collins

II

Rev. Dr. Paul B. McCleave, Chicago

III

The Most Rev. Joseph B. Brunini, Jackson

IV

Dr. Julian B. Feibelman, New Orleans

V

Milford O. Rouse, M.D., Dallas

VI

Rev. Dr. Robert P. Varley, Salisbury, Md.

SECTION ON OBSTETRICS AND GYNECOLOGY



DR. LOCKARD

Wednesday, May 15, 1963
Hurricane Room E
Beginning at 2:00 p.m.

Blanche Lockard, Jackson
Chairman

Frank L. Butler, McComb
Secretary

STERILIZATION AND THE LAW IN MISSISSIPPI
John E. Lindley, Meridian

METHODS OF CONTRACEPTION
Herbert H. Thomas, Birmingham, Alabama

MEDICO-LEGAL PROBLEMS IN CONNECTICUT
Charles L. Buxton, New Haven, Connecticut

THE LEGAL STATUS OF STERILIZATION PROCEDURES
Mr. Bernard D. Hirsh, Chicago

ELECTION OF 1964 SECTION OFFICERS
The Chairman Presiding (Only registered members of the section may vote)

SECTION ON PEDIATRICS



DR. MILLER

Wednesday, May 15, 1963
Lotus Mezzanine
Beginning at 2:00 p.m.

Joseph B. Miller, Jackson
Chairman

Mary J. Ward, Corinth
Secretary

MALABSORPTION SYNDROME IN INFANCY
Gerald H. Holman, Kansas City, Kansas

NEUROSURGICALLY CORRECTIBLE CONGENITAL LESIONS
Julian R. Youmans, Jackson

RHEUMATIC FEVER
Dorothy E. Brinsfield, Atlanta, Georgia

PEDIATRIC OPHALMOLOGICAL EMERGENCIES
John J. White, Jackson

ELECTION OF 1964 SECTION OFFICERS
The Chairman Presiding (Only registered members of the section may vote)

SECTION ON GENERAL PRACTICE



DR. LOTTERHOS

Thursday, May 16, 1963
Hurricane Room E
Beginning at 9:00 a.m.

William E. Lotterhos, Jackson
Chairman

John R. Bane, Jr., Jackson
Secretary

THE COLLEGE STUDENT HEALTH SERVICE—A GENERAL PRACTICE INSTITUTION
John C. Longest, State College

TREATMENT OF HYPERTENSION
James W. Culbertson, Memphis, Tennessee

CARE OF THE PREMATURE BABY
Walter W. Crawford, Tylertown

STATUS OF TREATMENT OF TUBERCULOSIS IN MISSISSIPPI
Hans K. Stauss, Jackson

ELECTION OF 1964 SECTION OFFICERS
The Chairman Presiding (Only registered members of the section may vote)

SECTION ON EYE, EAR, NOSE AND THROAT



DR. WESSON

Thursday, May 16, 1963
Fiesta Room
Beginning at 9:00 a.m.

Thomas W. Wesson, Tupelo
Chairman

Emmett M. Herring, Jr., Hattiesburg
Secretary

THE USE OF PLAIN GUT SUTURES IN CATARACT EXTRACTION
Emmett M. Herring, Jr., Hattiesburg

UVEITIS—MODERN DIAGNOSIS AND THERAPY
G. Victor Simpson, Washington, D.C.

TESTING THE HEARING—TECHNIQUES OF TESTING, INTERPRETATION, THERAPEUTIC GUIDANCE
Lyle M. Sellers, Dallas, Texas

ELECTION OF 1964 SECTION OFFICERS
The Chairman Presiding (Only registered members of the section may vote)

ESSAYISTS



Dr. Bowen

Frederick H. Bowen, M.D., Jacksonville, Florida. Medical Education: University of Virginia School of Medicine, 1936. Diplomate, American Board of Surgery.

Dorothy E. Brinsfield, M.D., Atlanta, Georgia. Clinical Instructor, Department of Pediatrics, Emory University School of Medicine. Medical Education: Medical College of Georgia, 1950. Diplomate, American Board of Pediatrics.



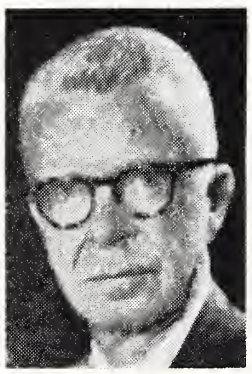
Dr. Brinsfield



Bishop Brunini

The Most Reverend Joseph B. Brunini, Jackson, Mississippi. Auxiliary Bishop, Diocese of Natchez-Jackson. Education: Georgetown University, Catholic University, and North American College, Rome, Italy.

Charles L. Buxton, M.D., New Haven, Connecticut. Medical Education: Columbia University College of Physicians and Surgeons, 1932. Diplomate, American Board of Obstetrics and Gynecology.



Dr. Buxton



Dr. Feibelman

Julian B. Feibelman, Ph.D., New Orleans, Louisiana. Rabbi, Temple Sinai. Education: Millsaps College, Hebrew Union College, and the University of Pennsylvania.

GEORGE M. FISTER, M.D., Ogden, Utah. President, American Medical Association. Medical Education: Rush Medical College, 1918. Diplomate, American Board of Urology.



DR. FISTER



MR. HIRSH

BERNARD D. HIRSH, LL.B., Chicago, Illinois. Director, Law Department, American Medical Association. Professional Education: Northwestern University, 1937.

GERALD H. HOLMAN, M.D., Kansas City, Kansas. Medical Education: University of Manitoba, 1953. Diplomate, American Board of Pediatrics.



DR. HOLMAN



REV. DR. MCCLEAVE

THE REVEREND DR. PAUL B. MCCLEAVE, Chicago, Illinois. Director, Department of Medicine and Religion, American Medical Association. Professional Education: Presbyterian Theological Seminary, Omaha, Nebraska, B.D.; University of Geneva, Switzerland, and University of Tulsa, Oklahoma, LL.D.

JARRELL E. MILLER, M.D., Dallas, Texas. Chief of Radiology, Baylor University Medical Center. Medical Education: Baylor University College of Medicine, 1938. Diplomate, American Board of Radiology.



DR. MILLER

ESSAYISTS



Dr. Rouse

Milford O. Rouse, M.D., Dallas, Texas. Vice Speaker, House of Delegates, American Medical Association. Medical Education: Baylor University College of Medicine, 1927. Diplomate: American Board of Internal Medicine.



Dr. Seabury

John H. Seabury, M.D., New Orleans, Louisiana. Professor, Department of Medicine, Louisiana State University School of Medicine. Medical Education: University of Michigan Medical School, 1940. Diplomate, American Board of Internal Medicine.



Dr. Sellers

Lyle M. Sellers, M.D., Dallas, Texas. Professor, Clinical Otolaryngology, Southwestern Medical School, University of Texas. Medical Education: University of Kansas School of Medicine, 1919. Diplomate, American Board of Otolaryngology.



Dr. Simpson

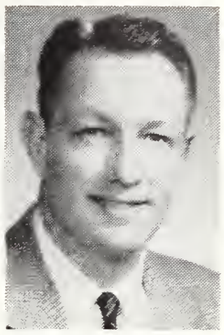
G. Victor Simpson, M.D., Washington, D. C. Medical Education: University of Western Ontario, Ontario, Canada, 1921. Diplomate, American Board of Ophthalmology.



Dr. Terris

Milton Terris, M.D., New York, New York. Head, Chronic Disease Unit, The Public Health Research Institute of the City of New York. Medical Education: New York University College of Medicine, 1939. Diplomate, American Board of Preventive Medicine.

HERBERT H. THOMAS, M.D., Birmingham, Alabama. Assistant Professor of Gynecology, Medical College of Alabama. Medical Education: Tulane University School of Medicine, 1938. Diplomate, American Board of Obstetrics and Gynecology.



DR. THOMAS



REV. DR. VARLEY

THE REVEREND DR. ROBERT P. VARLEY, Salisbury, Maryland. Rector, St. Peter's Episcopal Church. Education: Carroll College, Nashotah Seminary, and Philadelphia Divinity School.

MISSISSIPPI MEDICAL ALUMNI

University of Mississippi medical alumni will meet at the Buena Vista on Monday, May 13, 1963. Registration hours: 8:00 a.m. until 6:30 p.m. At 12:30 p.m., there will be a Nominating Committee luncheon, Dr. James Grant Thompson, Jackson, chairman. At 4:30 p.m., there will be a combined Board of Directors and general business meeting in the Sky Lounge, Dr. Howard A. Nelson, Greenwood, president, presiding. Evening sessions include the Fellowship Hour at 6:30 p.m. and the Seafood Jamboree, the Sky Lounge and Deck, with dancing afterward.

TENNESSEE MEDICAL ALUMNI

University of Tennessee medical alumni will enjoy a social hour and banquet in the Lotus Mezzanine, the Buena Vista, Tuesday, May 14, 1963, at 6:30 p.m. Dr. Willard H. Boggan, Jackson, is chairman.

TULANE MEDICAL ALUMNI

Medical alumni of the Tulane University will meet for a dinner occasion at 7:00 p.m. on Tuesday, May 14, 1963, in the Sun Room, the Buena Vista. Reservations can be made through the Tulane Alumni Office.

WOMAN'S AUXILIARY TO THE MISSISSIPPI STATE MEDICAL ASSOCIATION

40th Annual Session
The Buena Vista
May 13-15, 1963



MRS. RIDDELL

OFFICERS

MRS. A. T. TATUM
Hattiesburg
PRESIDENT

MRS. MAL S. RIDDELL
Winona
PRESIDENT-ELECT



MRS. TATUM

ANNUAL SESSION CHAIRMEN

MRS. H. K. ROUSE, JR.
Gulfport
General Chairman

MRS. J. HURD GADDY
Long Beach
Registration

MRS O. D. DABBS
Gulfport
Luncheon

MRS. ELDON L. BOLTON
Biloxi
Transportation

MRS. E. T. RIEMANN, JR.
Gulfport
Decorations

MRS. JAMES H. DEEN
Gulfport
Publicity

Monday, May 13, 1963

3:00-5:00 p.m. Registration, Mrs. J. Hurd Gaddy, Chairman
Lobby, The Buena Vista
3:30 p.m. Preconvention Executive Board Meeting
Card Room, The Buena Vista

Tuesday, May 14, 1963

7:30-8:30 a.m. Mrs. A. T. Tatum, Continental Breakfast for Auxiliary Members, Lotus Mezzanine, The Buena Vista

8:00-3:00 p.m. Registration
Lobby, The Buena Vista

8:30 a.m. General Session, Mrs. A. T. Tatum, Presiding
Lotus Mezzanine, The Buena Vista
Devotional
Rev. John W. Moore, Biloxi
Membership Pledge
Mrs. John C. Williams, Vicksburg
Address of Welcome
Mrs. J. T. Thompson, Moss Point
Response
Mrs. Stanley A. Hill, Corinth
Presentation of Convention Chairman
Mrs. H. K. Rouse, Jr., Gulfport
Presentation of President-elect
Mrs. Mal S. Riddell, Winona
Introductions
Greetings from C. P. Crenshaw, M.D.
President, MSMA
Greetings from John G. Archer, M.D.
President-elect, MSMA
Greetings from A. Street, M.D.
Auxiliary Advisory Chairman, MSMA
Report of AMA Auxiliary
Mrs. John G. Egger, Drew
Report of SMA Auxiliary
Mrs. T. A. Baines, Jackson
Greetings from SMA Auxiliary
Mrs. Elias Margo, President
Oklahoma City, Oklahoma
Memorial Service
Mrs. J. S. Haney, Columbia
Roll Call
Minutes
Recommendations of the Board
Other Business
Unit Presidents' Reports
President's Report
Mrs. A. T. Tatum, Hattiesburg
Credentials and Registration
Mrs. J. Hurd Gaddy, Long Beach
Report of the Nominating Committee
Mrs. John G. Egger
Election of Officers
Appointment of Delegates to AMA Auxiliary
Courtesy Resolutions
Mrs. Byron A. Mayo, Drew
Adjournment

AUXILIARY

12:30 p.m. Luncheon
Broadwater Beach Hotel
Mrs. O. D. Dabbs, Chairman
Mrs. A. T. Tatum, Presiding
Honoring Mrs. William G. Thuss, Birmingham, Ala., President, Woman's Auxiliary to AMA

Grace
Mrs. Dan Reikes, Hattiesburg
Introductions
Greetings from the AMA Auxiliary
Mrs. William G. Thuss, Birmingham, Ala.
Installation of Officers for 1963-64
Mrs. Thuss
Presentation of Gavel and Pin
Response of Incoming President
Mrs. Mal S. Riddell
Presentation of Past President's Pin
Mrs. J. T. Thompson
AMA-ERF Awards
Mrs. Arthur E. Brown, Columbus
Announcements
Adjournment

Wednesday, May 15, 1963

8:00 a.m. Past President's Breakfast
Sun Room, The Buena Vista
Mrs. John G. Egger, Presiding

8:00-5:00 p.m. Registration
Lobby, The Buena Vista

9:00 a.m. Seminar on Medicine and Religion
Lotus Room, The Buena Vista

3:00-4:00 p.m. Tea—"The Old Brick House"
Mrs. Eldon L. Bolton, Chairman

OTHER MEETINGS

MISSISSIPPI ASSOCIATION OF PATHOLOGISTS

The Buena Vista, Fiesta Room
Monday, May 13, 1963

ROBERT S. COOKE, Hattiesburg, *President*
ELIZABETH FERRINGTON, Jackson, *President-elect*
WILLIAM P. FEATHERSTON, Jackson, *Secretary*

9:00 a.m. Inborn Errors of Metabolism
David Yi-Yang Hsia, Chicago, Illinois
12:00 noon Luncheon Recess
1:00 p.m. Vasopressor Amines, Phenothiazides and Priscoline: Structure and Function
Robert R. Gatling, Jackson
1:30 p.m. Report of 12,000 Consecutive Exfoliative Cytology Cases
Thomas F. Puckett, Hattiesburg
2:00 p.m. Application of Chemical Analytic Procedures for Automation
William D. Atchison, Jackson
Recess, Coffee Break
3:00 p.m. Monsters and Runts
Joel Brunson, Jackson
3:30 p.m. Helpful Hints
4:30 p.m. Annual Business Meeting
6:00 p.m. Fellowship Hour and Banquet, Sun Room

MISSISSIPPI CHAPTER, AMERICAN ACADEMY OF PEDIATRICS

The Buena Vista, Fiesta Room
Tuesday, May 14, 1963

GUY C. JARRATT, Vicksburg, *Chairman*
HOWARD H. NICHOLS, Jackson, *Vice Chairman*
NOEL C. WOMACK, Jackson, *Secretary*

12:00 noon Fellowship Hour and Luncheon
2:00 p.m. Scientific Program
Business Meeting
6:30 p.m. Fellowship Hour and Banquet, Lotus Room South

OTHER MEETINGS

LOUISIANA-MISSISSIPPI OPHTHALMOLOGICAL AND OTOLARYNGOLOGICAL SOCIETY

The Edgewater Gulf
May 17-18, 1963

DONALD S. HALL, Vicksburg, *President*
FRANK L. BRYANT, Shreveport, *President-elect*
EDLEY H. JONES, Vicksburg, *Secretary*

Friday, May 17, 1963

8:00 a.m. Registration
9:00 a.m. Meeting Called to Order
Welcome of Guests and Extension of Floor Privileges
President Donald S. Hall
Introduction of Newly Elected Fellows
President-elect Frank L. Bryant
Announcements
Secretary Edley H. Jones
9:15 a.m. Serous Otitis
Sylvester C. Missal, Cleveland
10:30 a.m. Vertigo
Lyle M. Sellers, Dallas
Immediately following adjournment of the morning session at about 12:00 noon, there will be a meeting of the Louisiana Eye, Ear, Nose, and Throat Society.
1:45 p.m. President's Address
Secondary Glaucoma Following Contusion of the Eye
Donald S. Hall
2:05 p.m. Cataract and Glaucoma Surgery
Charles E. Iliff, Baltimore
3:20 p.m. Diseases Involving the Retina
William G. Everett, Pittsburgh
4:50 p.m. Council Meeting
Parlor D

Saturday, May 18, 1963

9:00 a.m. Common Office Procedures: Including Treatment of the Common Cold
Dr. Sellers

10:15 a.m. Upper Respiratory Allergy
Dr. Missal
Immediately following adjournment of the morning session at about 11:30 a.m., there will follow the Executive Session for Fellows only.
2:30 p.m. Management of Retinal Detachment
Dr. Everett
3:45 p.m. Surgical Techniques in Lesions of the Lids and the Adnexa
Dr. Iliff

ENTERTAINMENT FEATURES

Friday, May 17, 1963

9:00-10:30 a.m. Ladies Coffee Hour, Hawaiian Terrace
6:30 p.m. Fellowship Hour, Ballroom

Saturday, May 18, 1963

7:15 p.m. Fellowship Hour, Ballroom
7:45 p.m. Dinner Dance, Convention Hall
Corsages for the Ladies
Music by Rene Louapre, New Orleans

REGISTRATION FEES

For Fellows of the Society and Residents in Ophthalmology and Otolaryngology, there are no fees, but residents must have certificates from their superintendent or chief. For ophthalmologists and otolaryngologists in service, $5, and for all others, $10. This fee covers all charges except for guests at the dinner dance for which an additional charge of $7.50 will be made.

HOTEL RESERVATIONS

For reservations at the headquarters, write Mrs. Nan Meisner, Convention Manager, Edgewater Gulf Hotel, Edgewater Park, Miss., indicating that the reservation is for the meeting. For additional information, write Edley H. Jones, Secretary, 1301 Washington St., Vicksburg, Miss.

OTHER MEETINGS

AMERICAN COLLEGE OF SURGEONS

The Mississippi Chapter, American College of Surgeons, will sponsor a luncheon for Fellows on May 13, 1963, at the Buena Vista Beach Motel, Poolside Room, at 12:30 p.m. Officers are Drs. William L. Thornton, Meridian, president; R. J. Field, Jr., Centreville, president-elect; and Curtis P. Artz, Jackson, secretary.

MISSISSIPPI SOCIETY OF INTERNAL MEDICINE

There will be a luncheon and business meeting of the Mississippi Society of Internal Medicine on Tuesday, May 14, 1963, in the Lotus Room Center, Buena Vista, at 12:00 noon. Officers are Drs. T. T. Justice, Jr., Gulfport, president; Frederick E. Tatum, Hattiesburg, president-elect; and S. H. McDonnieal, Jackson, secretary.

MISSISSIPPI ORTHOPAEDIC SOCIETY

Members of the Mississippi Orthopaedic Society will enjoy a luncheon in the Sun Room, the White House, on Tuesday, May 14, 1963, at 12:00 noon. Officers are Drs. W. Griffin Bland, Gulfport, president; James C. Bass, Jr., Laurel, president-elect; and Edward A. Attix, Hattiesburg, secretary.

INTERNATIONAL COLLEGE OF SURGEONS

Fellows of the International College of Surgeons will conduct a luncheon meeting on Tuesday, May 14, 1963, at the Buena Vista Beach Motel, the Poolside Room, at 12:30 p.m. Officers are Drs. J. P. Culpepper, Jr., Hattiesburg, president; and Willis Walker, Jr., Hattiesburg, secretary.

FIFTY YEAR CLUB

Members of the Fifty Year Club will be honored at a luncheon on Tuesday, May 14, 1963, at the Buena Vista in the Card Room at 12:30 p.m.

OLE MISS CLASS REUNIONS

There will be simultaneous fellowship hour-dinner meetings of seven University of Mississippi medical alumni class groups, each beginning at 6:30 p.m. on Tuesday, May 14, 1963:

Class of '29, White House, Sun Room
Class of '36, White House, Magnolia Room
Class of '41, Buena Vista, Card Room
Class of '47, Buena Vista, Fiesta Room
Class of '48, Buena Vista, Hurricane Room E
Class of '50, Buena Vista, Deck
Class of '51, Buena Vista, Sky Lounge

PAST PRESIDENTS

Past presidents of the Mississippi State Medical Association and Woman's Auxiliary, respectively, will enjoy breakfast meetings on Wednesday morning, May 15, 1963, at the Buena Vista. MSMA past presidents will meet in the Poolside Room (Motel) at 7:30 a.m., and the Auxiliary past presidents in the Sun Room at 8:00 a.m.

MISSISSIPPI OB-GYN SOCIETY

Members of the Mississippi Ob-Gyn Society will meet in the Sun Room, Buena Vista, at 11:30 a.m. on Wednesday, May 15, 1963, for a fellowship hour and luncheon. Officers are Drs. Frank L. Butler, McComb, president; and Chester H. Lake, Jackson, secretary.

FLYING PHYSICIANS ASSOCIATION

Mississippi members of the Flying Physicians Association and non-member physicians interested in private flying will enjoy a luncheon at 12:00 noon on Wednesday, May 15, 1963, at the White House, Sun Room. Officers are Drs. Curtis W. Caine, Jackson, chairman; James L. Royals, Jackson, co-chairman; and Samuel B. Johnson, Jackson, secretary-treasurer.

MISSISSIPPI EENT ASSOCIATION

Members of the Mississippi EENT Association will meet at 2:00 p.m. on Wednesday, May 15, 1963, in the Magnolia Room, the White House. The speaker will be Mr. Grady Gilmore, Jackson, and a business meeting will follow. Officers are Drs. Joseph B. Rogers, Oxford, president; Lyne S. Gamble, Greenville, president-elect; and Samuel B. Johnson, Jackson, secretary.

SOUTHERN MEDICAL ASSOCIATION

An invitational breakfast meeting of Southern Medical Association officials and guests will be held Thursday morning, May 16, 1963, in the Sun Room, Buena Vista, at 7:30 a.m. Dr. Guy T. Vise, Meridian, chairman of the Council, is host.

MAGP LUNCHEON

The Mississippi Academy of General Practice will sponsor a luncheon on Thursday, May 16, 1963, in the Lotus Room South, Buena Vista. The speaker will be Cdr. C. D. Grojean, USN, commanding officer of the U. S. Nuclear Submarine "Barb." Officers of MAGP are Drs. J. Roy Bane, Jackson, president; Lawrence H. Briscoe, Tupelo, president-elect; Max L. Pharr, Jackson, secretary; and F. C. Minkler, Pascagoula, program chairman.

SECTION ON EENT LUNCHEON

The Section on Eye, Ear, Nose, and Throat will sponsor its annual luncheon at the Buena Vista, Sun Room, on Thursday, May 16, 1963, at 12:30 p.m.



The President Speaking

'A Medical Landmark'

C. P. CRENSHAW, M.D.
Collins, Mississippi

EXHORTATIONS FROM MEDICAL LEADERS are sure signs of spring. It's about this time of year that presidents' pages blossom out in medical journals with all sorts of injunctions to local society officers and delegates about what they must do at the upcoming annual session. Serious, even alarming, editorials are penned and "to-all-members-of-the-House-of-Delegates" letters are dispatched broadside.

As the 95th Annual Session approaches, our members should be considering what they wish from the delegates. This is a change of pace, to be sure, but responsibility in the medical community begins at the bottom with the individual and works through the representative process to the top policy pronouncement. So now is the time to draft that resolution, to discuss that idea, and to help your delegates to MSMA carry your wishes forward.

And there's quite a bit more to our annual session than review of the association's work with the charting of a new course. Our first and primary purpose is postgraduate education and scientific activity. Perhaps few other state medical associations of our size and resources conduct such an ambitious scientific assembly. Seven formal sections, a significant special feature, the Seminar on Medicine and Religion, a host of specialty society programs, the scientific and technical exhibits, and the opportunity of coming together professionally and fraternally make a Mississippi State Medical Association annual session something of a phenomenon. Frankly, it's too good to miss.

If ever there is a something-for-everybody occasion in the course of an association year, the annual session most nearly fits the specifications. It's a family affair, tailored to professional endeavor and salted with variety and recreation.

And it's every physician's opportunity to contribute to as well as to receive from his state medical association. That's why our 95th Annual Session, May 13-16 at Biloxi, will be a landmark in the course of medical events. ★★★

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

Volume IV, Number 4

April 1963

EDITORIALS

Blueprint for Bankruptcy of a Nation and Its Health

I

IT'S AS PHONY as a nine dollar bill, but it's also a fact of legislative life: the fourth consecutive proposal for compulsory federal health care of the aged under Social Security in as many Congresses is in the hopper. With a few political refinements aimed at making it seem what it isn't, the most recent version of King-Anderson is still King-Anderson with a new number, H.R. 3920 in the House and S. 880 in the Senate.

Structured on the tortured logic of federalism and couched in the twisted dialectic of social paternalism, it's the same old hoax and deception. The measure enjoys the blessings of the same sponsors as before, meaning specifically, the AFL-CIO, the Kennedy administration, and the whole roundtable of do-gooders, nuts, and doctrinaire social welfare staters. It wrongly assumes existence of a nonexistent need; it is fantastically extravagant; it could bankrupt the nation; and it will socialize American medicine.

The advocates of H.R. 3920 contradict their own tired, old arguments and practice deceit in a degree that would make the devil blush. The whole package is a fraud of monstrous proportion upon all the American people. Its pitiable focus is a group of 17 million persons whom it seeks to ostracize from society because of a mere biological characteristic, the fact that they are enjoying longer, healthier lives.

Cecil King's warmed-over blueprint for compulsory federal medical care is 75 pages long or eight more pages of tax-paid printing than he whipped up in 1961. Benefits, limited and inadequate for the job claimed, accomplished by the bill, are:

—From 45 to 180 days of hospital care, based upon exercise of options by the aged patient and his election to pay as much as $90 or two and one-half times the average per diem cost.

—Up to 180 days of skilled nursing home services immediately following hospitalization.

—Home health services up to a maximum of 240 visits during a calendar year, including intermittent nursing care, physical, occupational, or speech therapy, medical social services, medical supplies (other than drugs and biologicals), and medical services of an intern or resident under an approved teaching program.

—Outpatient hospital diagnostic services, subject to a minimum payment of $20 for each complete diagnostic study.

Although avidly merchandised as the "Hospital Insurance Act of 1963," which it patently is not, the proposal still furnishes physicians' services. Payment may be made for services of pathologists, radiologists, physiatrists, and anesthesiologists rendered while the beneficiary is hospitalized. Services of interns and residents would also

be provided when these physicians are under teaching programs approved by the Council on Medical Education and Hospitals of the American Medical Association or, in the case of an osteopathic hospital, approved by a "recognized body approved for the purpose by the Secretary (of Health, Education, and Welfare)."

II

Apart from being mislabeled, misrepresented, and mistaken in concept, H.R. 3920 is, unto itself, a liar by all the clocks in Switzerland. Section 1702 of the bill is entitled "Free Choice by Patient Guaranteed," but this is cynically superseded by Sections 1708 through 1710 which direct the Secretary to promulgate care criteria, to evaluate institutions in which care would be rendered, to determine what constitutes reasonable payment amounts, and to terminate agreements on those care sources not measuring up to federally established standards.

Free choice, indeed!

The proponents of the legislation ought to get together and untangle their signals, too. In Section 2, the declaration of purpose is put this way: "The Congress hereby finds that the heavy costs of hospital care and related health care are a grave threat to the security of aged individuals, most of them are not able to qualify for and to afford private insurance . . ."

Now in 1962, some 55 per cent of all Americans over age 65 owned some form of health insurance or voluntary prepayment. At best, Mr. King's "most" is 45 per cent, losing something in his translation. Even the Department of Health, Education and Welfare concedes that by 1970, at least 70 per cent of the aged will be covered by health insurance.

The bill purports to do a job which it could not possibly do. It states a need which can't be demonstrated, presents a phony panacea, and taxes the daylights out of generations yet unborn so that public funds can be poured out like yesterday's dishwater on a political proposition that wouldn't work, even if it were remotely needed.

Through liberal mysticism and fiscal legerdemain, the proponents say that the gift-wrapped package will cost only $13 a year in more Social Security taxes. What it really does on pages 62 through 66 is to propose amendments to the Internal Revenue Code of 1954 to make the additional tax $55 for the first year on everybody in the nation earning $5,200. In fact, a tax schedule is included to make the employee and employer *pay exactly $507 annually in Social Security taxes after 1967!*

And not a single benefit would accrue to a single person before Jan. 1, 1965, if the measure were enacted into law tomorrow.

III

Few Americans realize just how costly socialized medicine can be. President Kennedy said in his health message that this program would amount to an outlay of $5.6 billion in the first four years, an average of $1.4 billion annually. This is about as optimistic as his foreign policy. A more realistic first year cost, says AMA's Department of Economic Research, is $2.3 billion and more thereafter. All of this, of course, is the familiar old Social Security pattern of unfunded benefits and rising taxation.

With the proposed advances in Social Security taxation upon employees and employers, 31 states would pay out more to Washington in Social Security and general taxes than they could possibly anticipate in benefits returned per aged individual in their respective populations. But that's not new because a tax dollar loses weight in making the round trip from home to Washington and back again as a federal beneficence.

Some people, to be sure, will believe anything. But how anybody, given only a taste of the facts, could conceive of H.R. 3920 as being other than fraudulent flim-flam is beyond rational comprehension.

IV

This bill, as was the case with its notorious predecessors, must die the legislative death it richly deserves. It is a hoax, a deception, and a tissue of contradictions by any yardstick. It will socialize medicine and it will not benefit a single American medically in a manner he is not or could not already be helped. It is a blueprint for total medical welfarism and a calculated plan for the destruction of voluntary prepayment and health insurance.

That the unctous assurances of prohibiting "any federal officer or employee to exercise any supervision or control over the practice of medicine or the manner in which medical services are provided" or the claims of the proponents to the contrary, the final section of the bill is a grand design for total socialization of medicine.

It is *total* federal control when the measure directs the Secretary of HEW to develop recommendations to the Congress relating to (1) the adequacy of existing facilities for health care for purposes of the program established by this Act;

(2) methods for encouraging the further development of efficient and economical forms of health care which are a constructive alternative to inpatient hospital care; (3) the feasibility of providing additional types of health insurance benefits within the financial resources provided by this Act; and (4) the effects of the deductibles upon beneficiaries, hospitals, and the financing of the program.

The distinguished insurance executive, E. J. Faulkner of Lincoln, Neb., said that "in America, we enjoy the highest quality medical care of any large nation. Most of us believe this stems importantly from a medical profession free from lay interference in professional matters."

The King-Anderson crowd has plans aplenty for all the interference that can be written into the statute books. They care not one whit for the health of the nation, for its fiscal integrity, nor for the aged whose plights they loudly bewail. In any event, history must judge them for what they are and the judgment will be harsh. But harsher yet will be history's judgment of those who understand this design of surd evil and do nothing to halt its course.—R.B.K.



The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

Ferguson, James Vaiden, Jr., New Albany. Born North Carrollton, Miss., Oct. 5, 1935; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned Baroness Erlanger Hospital, Chattanooga, Tenn., one year; elected Feb. 3, 1963, by North Mississippi Medical Society.

Haynes, Douglas Bryant, Jr., Clarksdale. Born Finley, Tenn., Dec. 25, 1936; M.D., University of Tennessee College of Medicine, Memphis, 1961; interned John Gaston Hospital, Memphis, Tenn., one year; currently a commissioned officer with the U. S. Public Health Service at the Coahoma County Health Department, Clarksdale; elected Nov. 7, 1962, by Clarksdale and Six Counties Medical Society.

Levy, Julias Lazard, II, Clarksdale. Born Clarksdale, Miss., Nov. 13, 1933; M.D., Tulane University School of Medicine, New Orleans, La., 1957; interned Charity Hospital of Louisiana, New Orleans, one year; general surgery residency, Charity Hospital of Louisiana, New Orleans, four years; certified by the American Board of Surgery in 1963; elected Nov. 7, 1962, by Clarksdale and Six Counties Medical Society.

Love, William DeLoss, IV, Jackson. Born Hampton, Va., Jan. 17, 1924; M.D., Washington University School of Medicine, St. Louis, Mo., 1947; interned Barnes Hospital, St. Louis, Mo., one year; residencies, Barnes Hospital, St. Louis, Mo., two years, and Tulane University School of Medicine, New Orleans, La., two years; Fellow, American College of Surgeons; member, Central Society for Clinical Research; Diplomate, American Board of Internal Medicine; elected Feb. 5, 1963, by Central Medical Society.

Sistrunk, William Frank, Jackson. Born Jackson, Miss., Dec. 4, 1933; M.D., Tulane University School of Medicine, New Orleans, La., 1957; interned Charity Hospital of Louisiana, New Orleans, one year; pediatric residency, Charity Hospital of Louisiana, New Orleans, two years; lieutenant, U. S. Navy, two years; elected Jan. 10, 1963, by Central Medical Society.

Suess, James Francis, Jackson. Born Rock Island, Ill., Nov. 27, 1919; M.D., Northwestern University Medical School, Chicago, Ill., 1952; interned U. S. Public Health Service Hospital, New Orleans, La., one year; psychiatry residency, Warren State Hospital, Pa., three years; Fellow, American Psychiatric Association; member, Pennsylvania Psychiatric Society; postgraduate course in psychiatry, University of Pennsylvania School of Medicine, three months, and Columbia University Medical School, two months; fellowship in psychiatry, University of Pittsburgh School of Medicine, Penn., two months; certified by the American Board of Psychiatry in 1958; captain, U. S. Army, four years; elected Jan. 10, 1963, by Central Medical Society.

Thaggard, Andrew Lamar, Jr., Madden. Born Madden, Miss., March 19, 1936; M.D., University of Mississippi School of Medicine, Jackson, 1961; interned Methodist Hospital, Memphis, one year; elected Jan. 10, 1963, by Central Medical Society.

Wheatley, Mary Lane Burkes, Prentiss. Born Carson, Miss., Aug. 20, 1935; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned Mississippi Baptist Hospital, Jackson, one year; elected Dec. 18, 1962, by South Mississippi Medical Society.

PERSONALS

WARREN C. JONES of Forest has been appointed by President Kennedy to serve as a member of the 14-man assaying commission which checks the silver content and weight of coins minted at Philadelphia and Denver. The appointment was made at the recommendation of Senator John C. Stennis. Dr. Jones recently spent a week in Philadelphia working with the commission to examine coins minted in 1962. A coin collector for about 25 years, Dr. Jones is a member of the American Numismatic Association, which has 25,000 members, and the Mississippi Numismatic Association, which has around 250 members. His personal coin collection numbers over 1,000 coins, chiefly domestic.

JAY J. KAZAR of Tchula has announced his candidacy for the office of coroner of Holmes County. Dr. Kazar is a graduate of the University of Tennessee Medical School and a member of the Delta Medical Association, the Mississippi State Medical Association, and the American Medical Association. He has served as vice president of the Mid-South Postgraduate Medical Assembly.

WILLIAM A. NEELY, associate professor, Department of Surgery, University of Mississippi School of Medicine, presented a paper before the Society of University Surgeons at the organization's February meeting in Seattle.

FLOY J. MOORE, chairman, Department of Psychiatry, University of Mississippi School of Medicine, was a program participant at the February meeting of the Southern Professors of Psychiatry held in Washington, D. C.

CHARLES L. NEILL, JR., of Jackson, clinical associate professor of neurosurgery at the University of Mississippi School of Medicine, was elected president of the Southern Neurosurgical Society at the annual meeting in February. The society is composed of physicians from all the Southern states.

J. P. WIGGINS, of Cleveland, was featured in the Feb. 21 issue of the *Bolivar Commercial*. A graduate of the University of Tennessee Medical School, Dr. Wiggins first opened his practice in 1907 in Eupora. He moved to Merigold in 1913 and to Cleveland in 1930. Dr. Wiggins is a member of the Board of Directors of the Grenada Bank and of the Cleveland Federal Savings and Loan Association. He is an emeritus member of MSMA and a member of the Fifty Year Club.

DEATHS

DILWORTH, WARREN MILLER, Jackson. M.D., University of Nebraska College of Medicine, Omaha, 1939; interned University of Nebraska Hospital, Omaha, one year; member, American Society of Internal Medicine; colonel, U. S. Army, six years; died Feb. 15, 1963, aged 53.

DICKS, JOHN WILLIAM DUNCAN, Vicksburg. M.D., Tulane University School of Medicine, New Orleans, La., 1899; served as a lieutenant colonel in World War I; member, Southeastern Surgical Congress; Fellow, American College of Surgeons; president of MSMA 1933-1934; emeritus member of MSMA and member of Fifty Year Club; retired from active practice in 1946; died at Mercy Hospital, Vicksburg, March 5, 1963, aged 89.

ELEY, ROBERT CARL, Moss Point. M.D., Medical College of Alabama, Birmingham, 1911; president of Coast Counties Medical Society in 1934; emeritus member of MSMA and member of the Fifty Year Club; died Feb. 7, 1963, aged 86.

MAYES, HUGH NORBIN, New Albany. M.D., Memphis Hospital Medical College, Tenn., 1901; interned John Gaston Hospital, Memphis, Tenn., 15 months; Fellow, American College of Surgeons; emeritus member of MSMA and member of the Fifty Year Club; died Jan. 30, 1963, aged 85.

ROBERTS, OSCAR WILLIAM, Sturgis. M.D., Memphis Hospital Medical College, Tenn., 1910; died Feb. 8, 1963, aged 79.

SIMPSON, JOEL ALFORD, JR., Wiggins. M.D., Baylor University College of Medicine, Houston, 1942; interned Baptist Hospital, New Orleans, La., one year; member, American Academy General Practice; died Feb. 22, 1963, aged 46.

Book Reviews

A Primer of Water, Electrolyte, and Acid-Base Syndromes. 2nd ed. By Emanuel Goldberger, M.D., Attending Physician, Montefiore Hospital; Consulting Cardiologist, Lincoln and Misericordia Hospitals, and Lecturer in Medicine, Columbia University, New York. 374 pages. Philadelphia: Lea and Febiger, 1962. $6.00.

"The physician should be able to diagnose and treat patients with water, electrolyte, or acid-base disturbances in much the same way as he diagnoses and treats a patient with pneumococcal pneumonia," according to Dr. Goldberger in the preface to this new edition. He has "described the various disturbances in terms of patients and clinical syndromes, rather than as chemical disturbances." This is in contrast to the usual technical discussions of chemical concentrations and mathematical equations which comprise many of the works devoted to this subject. He has attempted to accomplish his purpose in a manner which is both brief and concise yet relatively complete, well organized, and adequately annotated, considering the voluminous literature in this field.

The book is divided into five sections, including one section devoted to basic physiological and biochemical concepts involved in regulation of body water, three sections devoted to syndromes associated with water disturbances, sodium disturbances, and disturbances in acid-base balance, and a final section devoted to principles of fluid therapy. The body of the text is followed by four appendices presenting brief discussions of some of the mathematical and technical procedures involved.

Those sections of the book devoted to clinical syndromes are well organized, using the format which is frequently employed in textbooks of medicine. Each clinical entity is described in terms of definition, pathological physiology, etiology, symptoms and signs, laboratory findings, diagnosis, prophylaxis and treatment. Necessarily brief in so broad a field, the discussions have been well written and include adequate pertinent information with selected references for those interested in more detailed information.

Particularly well done are the sections devoted to symptoms and signs. These include detailed clinical descriptions which may be of differential as well as illustrative value. The laboratory sections also include several simple tests which should be of assistance in bedside diagnosis and in following some of these clinical syndromes. Unfortunately, the description of acid-base changes of necessity is in terms of laboratory tests which usually are not available outside of teaching and certain large city hospitals. However, the excellent discussion of clinical aspects make this less of a disadvantage than in the more technically oriented books.

In the section devoted to principles of fluid therapy are included useful discussions of routes of administration, rates of administration, basic water and electrolyte requirements, and of special problems relating to surgical patients and to infants and children. In addition, he has included a pertinent 27-page discussion of solutions available for fluid therapy with their indications, routes, and rates of administration. The appendices afford directions regarding calculation of osmotic shifts of water and electrolytes and of quantities of water and electrolytes necessary to correct them. In addition, one appendix is devoted to discussion of the effect of hyperglycemia on the serum sodium concentration.

This book is well written, well organized, highly readable, and undoubtedly would be of value to any physician engaged in fluid therapy. Its value would be more as a handbook for frequent, if not daily, use, than as an addition to a reference library, in which its use would be less frequent. In addition, it would appear that Dr. Goldberger's approach to his subject would make the study of principles of fluid therapy more attractive to medical students and physicians than would some of the other texts which are more technical and biochemical in orientation.

R. S. Spain, M.D.

Books Received

Diagnosis and Management of Pain Syndromes. By Bernard E. Finneson, M.D., neurosurgeon, the Episcopal Hospital, Philadelphia. 261 pages with illustrations. Philadelphia: W. B. Saunders Company, 1962. $8.50.

LITERATURE / Continued

Clinical Biochemistry. By Abraham Cantarow, M.D., professor of biochemistry, Jefferson Medical College, and Max Trumper, Ph.D. Sixth edition. 776 pages with illustrations. Philadelphia: W. B. Saunders Company, 1962. $13.00.

Gynecologic and Obstetric Pathology. By Edmund R. Novak, M.D., assistant professor of gynecology, Johns Hopkins Medical School, and J. Donald Woodruff, M.D., associate professor of gynecology, Johns Hopkins Medical School. Fifth edition. 713 pages with 761 illustrations. Philadelphia: W. B. Saunders Company, 1962. $16.00.

Strabismus: Symposium of the New Orleans Academy of Ophthalmology. Edited by George M. Haik, M.D., professor of ophthalmology and head of the department, Louisiana State University School of Medicine. 369 pages with illustrations. St. Louis: The C. V. Mosby Company, 1962. $18.00.

Synopsis of Genitourinary Disease. By Austin I. Dodson, Jr., M.D., associate clinical professor of urology, Medical College of Virginia, and J. Edward Hill, M.D., assistant clinical professor of urology, Medical College of Virginia. Seventh edition. 384 pages with 123 illustrations. St. Louis: C. V. Mosby Company, 1962. $7.75.

Psychosomatic Medicine. Edited by John N. Nodine, M.D., assistant professor of medicine, Hahnemann Medical College and Hospital, Philadelphia, and John H. Moyer, M.D., professor and chairman of the Department of Medicine, Hahnemann Medical College and Hospital with 135 contributors. 1002 pages with illustrations. Philadelphia: Lea and Febiger, 1962. $16.50.

Skin Surgery. By Ervin Epstein, M.D., associate clinical professor of dermatology, University of California Medical School. Second edition. 339 pages with 472 illustrations. Philadelphia: Lea & Febiger, 1962. $10.00.

Synopsis of Obstetrics. By Charles E. McLennan, M.D., professor of obstetrics and gynecology, Stanford University School of Medicine, Palo Alto, Calif. Sixth edition. 464 pages with 157 illustrations. St. Louis: The C. V. Mosby Company, 1962. $6.75.

Malpractice Law Dissected for Quick Grasping. By Charles L. Cusumano, member of the New York Bar. 132 pages. New York: Medicine-Law Press, Inc., 1962. $10.00.

Fundamentals of Voluntary Health Care. By George B. Huszar. 457 pages. Caldwell, Idaho: The Caxton Printers, Ltd., 1962. $6.00.

The Medical Department, United States Army, In World War II: Wound Ballistics. Prepared by Medical Department, United States Army with Major James C. Beyer, M.C., editor. Washington: Office of the Surgeon General, Department of the Army. $7.50.

Surgery in World War II: Activities of Surgical Consultants. Volume I. Prepared by Medical Department, United States Army with B. Noland Carter, M.D., editor. Washington: Office of the Surgeon General, Department of the Army, 1962. $6.50.

Gynecology. Langdon Parsons, M.D., professor of obstetrics and gynecology, Boston University School of Medicine, and Sheldon C. Sommers, M.D., pathologist, Scripps Memorial Hospital. 1250 pages with illustrations. Philadelphia: W. B. Saunders Company, 1962. $20.00.

Saunders Announces New Editions

W. B. Saunders Company features the following new editions in their full page advertisement appearing elsewhere in this issue:

REED—COUNSELING IN MEDICAL GENETICS

An up-to-date book concerning the chances of a hereditary disability being passed from parent to child.

NADAS—PEDIATRIC CARDIOLOGY

A practical text covering the entire field of heart disease in children.

HINSHAW and GARLAND—DISEASES OF THE CHEST

A useful book unsurpassed for vividness of illustration and completeness of coverage.

Medical Librarians Schedule June Congress

The Second International Congress on Medical Librarianship is scheduled for June 16-22, 1963, in Washington, D. C.

The congress will be given under the auspices of the Medical Library Association in connection with the 62nd Annual Meeting of the association. The purpose of the congress is to foster the development and improvement of medical library service throughout the world. Papers will be presented by librarians from a dozen countries on the problems, needs, and plans of medical libraries.

Further information may be secured from Miss Ruth MacDonald, National Library of Medicine, Bethesda 14, Md.

President Crenshaw Testifies Against H.R. 12; Attacks Federal Aid to Education as Unnecessary

In recent testimony before the House Committee on Interstate and Foreign Commerce at Washington, Dr. C. P. Crenshaw, MSMA president, expressed the association's opposition to H.R. 12, the Health Professions Educational Assistance Act of 1963, federal aid to education.

Dr. Crenshaw opposed on two counts the first section of H.R. 12, which would provide federal funds for school construction. He charged that the stringent criteria accompanying construction grants were "strangely inconsistent" with the prohibition of control of supervision of schools by any federal official. Secondly, he denied that federal funds were necessary for the construction of medical schools. He noted that state, county, and municipal funds were found for other categories of public works, such as coliseums, stadiums, public auditoriums, and cultural centers, and could conceivably be found for medical schools.

Turning to the second section of H.R. 12, the scholarship program, Dr. Crenshaw observed that the many public and private sources of medical scholarship and training loans available to medical students made federal aid unnecessary. He pointed out that the AMA Council on Medical Education and Hospitals has stated that the enormous sums of federal money now going to medical schools exert influence on school growth and curriculum emphasis. He quoted this statement included in the council's findings: "In recent years, it has not been unusual for agencies to invite proposals for projects in specific areas. This practice has resulted, in part, from large governmental appropriations intended to assist in the development of specific areas. Under these circumstances, institutional growth is almost certain to be uneven and unbalanced."

Dr. Crenshaw observed that enactment and implementation of the proposed federal scholarship and subsidy section of H.R. 12 would only extend and amplify the federal controls over medical education. He noted that this section of the bill does not contain a disclaimer over supervision or control of medical schools and concluded that "no valid need for this legislation has, in our judgment, been demonstrated."

Concerning the third section of the bill, which provides federal funds for extension and expansion of research facilities construction, Dr. Crenshaw told the committee that "our objections are essentially the same as to the first section on construction and facilities rehabilitation." In addition, he said, the present proposal would liberalize the granting of federal funds for research facilities construction from the present unit of 50 per cent federal funds to as much as 100 per cent. A second liberalization is found in broadened eligibility in that funds would be granted not only for research facilities construction but also for building facilities whose purpose is related to research, he noted.

"We find no evidence to suggest that medical science can be advanced at a more accelerated pace through this construction program nor do we accept the inferred premise of a need which can be met only through provision of more federal funds," he stated.

Concluding his testimony, Dr. Crenshaw said, "We believe that the basic concept of H.R. 12 erroneously presumes that political subdivisions are neither willing nor able to provide sufficiently for tax-supported medical schools. Similarly, it seems to assume that governing boards of private institutions have neither the resource nor initiative to continue to fulfill their historic and impressive role in medical education. Conversely, we respectfully recommend that the Congress seek ways and means of withdrawing federal influence and control from academic activities toward the end that every educational institution, medical and otherwise, can be genuinely free to present a curriculum best suited to the needs of the area it serves, to interpret through this curriculum and associated endeavors the goals and aspirations of those under whose sponsorship it functions, and to determine its own academic course and future within the context of these opportunities and responsibilities."

In opening his testimony to the committee, Dr. Crenshaw told the committee that the position of MSMA with respect to H.R. 12 and preceding identical bills was established by the association's

Board of Trustees on Jan. 15, 1959, and confirmed by the House of Delegates at the 91st Annual Session, May 12-14, 1959.

In other testimony, the Student American Medical Association expressed its opposition to Section 2 of H.R. 12, the use of federal funds for medical student loans.

In a telegram to Congressman Oren Harris (D.-Ark.), SAMA's national president, James A. Brooks, a senior at the University of Oregon Medical School, called attention to the position adopted by his organization at its May 1962 meeting.

The SAMA House of Delegates, which represents the majority opinion of 18,000 medical students, stated that SAMA considers loans rather than scholarships to be the "least offensive or least objectionable" possible action on the part of the Federal government. However, the group stated that new or potential sources of monetary aid had not been fully explored.

Since that time, according to Mr. Brooks, the AMA-ERF loan program has proved to be a great success and has granted loans totaling more than nine million dollars to over 3,000 medical students and 1,700 residents and interns.

"SAMA in 1954 was instrumental in developing the concept of a loan fund, such as AMA-ERF started, and we will continue our efforts along these lines," Brooks said. "While the amount of funds necessary for such a loan program as H.R. 12 proposes may be a minor amount in the federal budget, it cannot be a source of satisfaction to us to know that we are among the ever-increasing throng that turns to the federal government for assistance."

Mr. Brooks stressed that it is the contention of SAMA that at the present time the need for loans to medical students is being met through other sources and the necessity for federal funds is yet to be demonstrated.

Four Physicians Renamed To Blue Plan Board

Four Mississippi physicians have been re-elected to the Board of Directors of the Mississippi Blue Cross-Blue Shield.

Renamed at the annual membership meeting were Drs. S. Lamar Bailey of Kosciusko; M. Q. Ewing of Amory; Joseph B. Rogers of Oxford, and James G. Thompson of Jackson.

The physician-directors were nominated by the MSMA House of Delegates at the 94th Annual Session and elected by the State Blue Cross-Blue Shield Board.

Mental Health Officials Attend AMA Conference



Dr. Hamilton F. Ford of Galveston, Texas, left, chairman of AMA's Council on Mental Health, discusses the program with Dr. John J. Head of Whitfield, chairman of the MSMA Committee on Mental Health, during the recent ninth Annual Conference of State Mental Health Representatives sponsored by AMA at Chicago.

Pastors Invited to Seminar On Medicine and Religion

Members of the Mississippi State Medical Association are encouraged to invite their pastors and rabbis to the May 15 Seminar on Medicine and Religion, a highlight special feature of the 95th Annual Session at Biloxi, May 13-16, 1963. This was the joint announcement of Drs. C. P. Crenshaw, president, and C. G. Sutherland, chairman of the Council on Scientific Assembly. The seminar will present four nationally known clergymen and a physician church leader.

"The unique and timely seminar," Dr. Sutherland said, "is an expression of the growing awareness of relations between theology and medicine and the concern each has for the spiritual and physical well being of the patient. By no means is it a closed meeting and the association will wel-

come Mississippi clergymen as guests of the association."

Dr. Crenshaw explained that "the special presentation has generated high interest and favorable response since its announcement last month. We hope that members will invite their respective clergymen to share this unusual opportunity with us."

Appearing on the Wednesday morning seminar will be the Most Rev. Joseph B. Brunini of Jackson, auxiliary bishop of the Roman Catholic Diocese of Jackson-Natchez; Dr. Julian B. Feibelman of New Orleans, rabbi of Temple Sinai; Rev. Dr. Paul B. McCleave of Chicago, director of AMA's Department of Medicine and Religion, a Presbyterian minister; Rev. Dr. Robert P. Varley of Salisbury, Md., rector of the Salisbury Episcopal Parish; and Milford O. Rouse, M.D., of Dallas, chairman of the AMA Committee on Medicine and Religion. Dr. Howard A. Nelson of Greenwood, vice speaker of MSMA's House of Delegates and past president of the association, will preside and moderate the seminar, Drs. Crenshaw and Sutherland said.

Prior notice of attendance by clergymen who are guests of members is not necessary, the announcement continued, but where physicians inform association headquarters at Jackson in advance, registration cards and badges will be prepared before the annual session for convenience. The seminar will begin at 9 a.m. at the Buena Vista, meeting headquarters, and adjourn by noon on May 15. In addition to the five seminar members, Dr. Crenshaw will appear to keynote the program.

The feature presentation will afford MSMA members first hand acquaintance with AMA's new Department of Medicine and Religion whose purpose it is to establish effective communication between clergymen and physicians at local, state, and national levels; to develop deeper understanding between theological and medical sciences; and to develop areas of interrelationship between physicians and clergymen, creating a mutual awareness of concerns, problems, and the changing ideas of each.



Copyright, Mississippi State Medical Association

"The dog doesn't have rabies? Good. How does he feel otherwise?"

Board of Health Announces Licensure Exams

The Mississippi State Board of Health has announced its 1963 medical licensure examinations for June 17 and 18. The tests will be conducted in the Arlington Hall of the Robert E. Lee Hotel in Jackson.

Examinations on the first two years' study of medicine are scheduled for June 17. Examinations on the last two year's study of medicine are set for June 18. The tests begin at 8:00 a.m. each day.

Further information may be secured from Dr. A. L. Gray, executive officer, State Board of Health, Jackson.

Four State Physicians Named Fellows of ACOG

The American College of Obstetricians and Gynecologists has recently released the names of 587 new Fellows inducted into the college.

Four Mississippi physicians were included in the group including Drs. John Collins Williams of Greenville; John T. Kitchings of Jackson; Blanche Lockard of Jackson, and Otis B. Wooley, Jr., of Jackson.

The college now has a roster of more than 80,000 including life, associate, and junior Fellows. Among them are obstetric and gynecologic specialists from all sections of the United States and Canada.

To become a Fellow of ACOG a physician must have completed an approved program of medical training, limited his practice completely to obstetrics and gynecology for at least five years, and have the unqualified professional approval of his colleagues.

Mid-South Assembly Honors Living Past Presidents

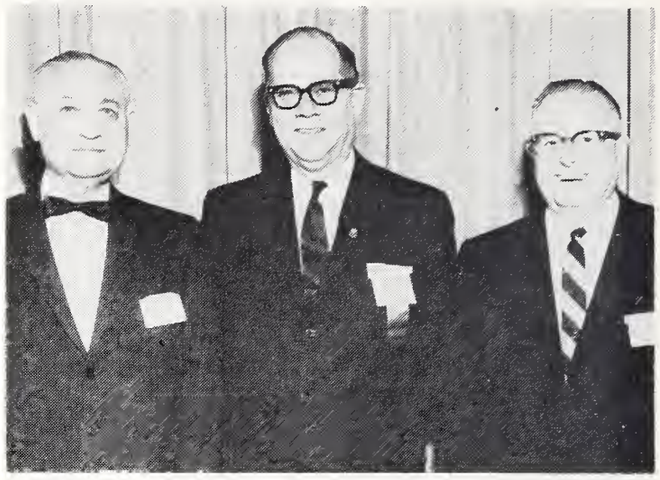
Seven Mississippi physicians were among 22 past presidents honored by the Mid-South Postgraduate Medical Assembly during the group's 74th Annual Session.

The assembly recognized its living past presidents at the annual banquet on Feb. 14, presenting each with a plaque. The four-day annual meeting was held Feb. 12-15 at the Hotel Peabody in Memphis.

Mississippi presidents and the years they held the post were Drs. William H. Anderson of Booneville, 1926; L. W. Long of Jackson, 1939; Frank M. Acree of Greenville, 1948; John G. Archer of Greenville, 1952; R. B. Caldwell of Baldwyn, 1955; C. W. Patterson of Rosedale, 1958; Omar Simmons of Newton, 1961.



Dr. Lawrence W. Long of Jackson is shown with the plaque he received as a past president of the Mid-South Postgraduate Medical Assembly. The assembly honored 22 living past presidents, including seven Mississippians, during its 74th Annual Session. Dr. Long served as president of the assembly in 1939.



Dr. Stanley A. Hill of Corinth, center, 1963-64 president of the Mid-South Postgraduate Assembly, discusses the group's February meeting with Dr. Gilbert J. Levy of Memphis, left, immediate past president, and Dr. J. P. Price of Monticello, Ark., president-elect.

Of the other past presidents recognized, nine were from Arkansas and six were from Tennessee.

Another Mississippi physician, Dr. Stanley A. Hill of Corinth, was installed as 1963-64 president of the assembly at the close of the session.

UMC Announces April Lecturers

The University Medical Center has announced five guest lecturers for the month of April.

On April 1, Dr. Norman Heatley from the Sir William Dunn School of Pathology, Oxford University, England, will be the Dean's Hour speaker.

The Student's Visiting Professor will be Dr. M. Edward Davis, chairman of the Department of Obstetrics and Gynecology, University of Chicago School of Medicine, who will be on campus from April 3 to 6.

Dr. Amos Christie, chairman of the Department of Pediatrics at the Vanderbilt University School of Medicine, will speak on April 8. On April 10, Dr. Derek Hockaday will talk about oxalate stones and hyperoxaluria at 4 p.m. He is presently a guest investigator in endocrinology at Massachusetts General Hospital in Boston and his permanent post is Nuffield, Reader in Medicine, at Oxford University.

Starting off the month of May, Dr. Frederick Van Bergen of the Department of Anesthesiology,

University of Minnesota, will lecture and hold conferences from May 4 to 7.

ACS Trauma Course Set for April 24-27

The Chicago Committee on Trauma of the American College of Surgeons has announced its Seventh Postgraduate Course in Trauma for April 24-27. The course will be conducted at the John B. Murphy Auditorium in Chicago.

Dr. Sam W. Banks is directing the course which is acceptable for 31½ hours of Category II credit by the American Academy of General Practice. Registration fee is $75. Additional information may be obtained from Dr. John J. Fahey, 1791 Howard St., Chicago 26, Ill.

900-Bed Negro Unit Dedicated at Whitfield

The new 900-bed Negro unit of the Mississippi State Hospital was dedicated March 12 by Governor Ross Barnett.

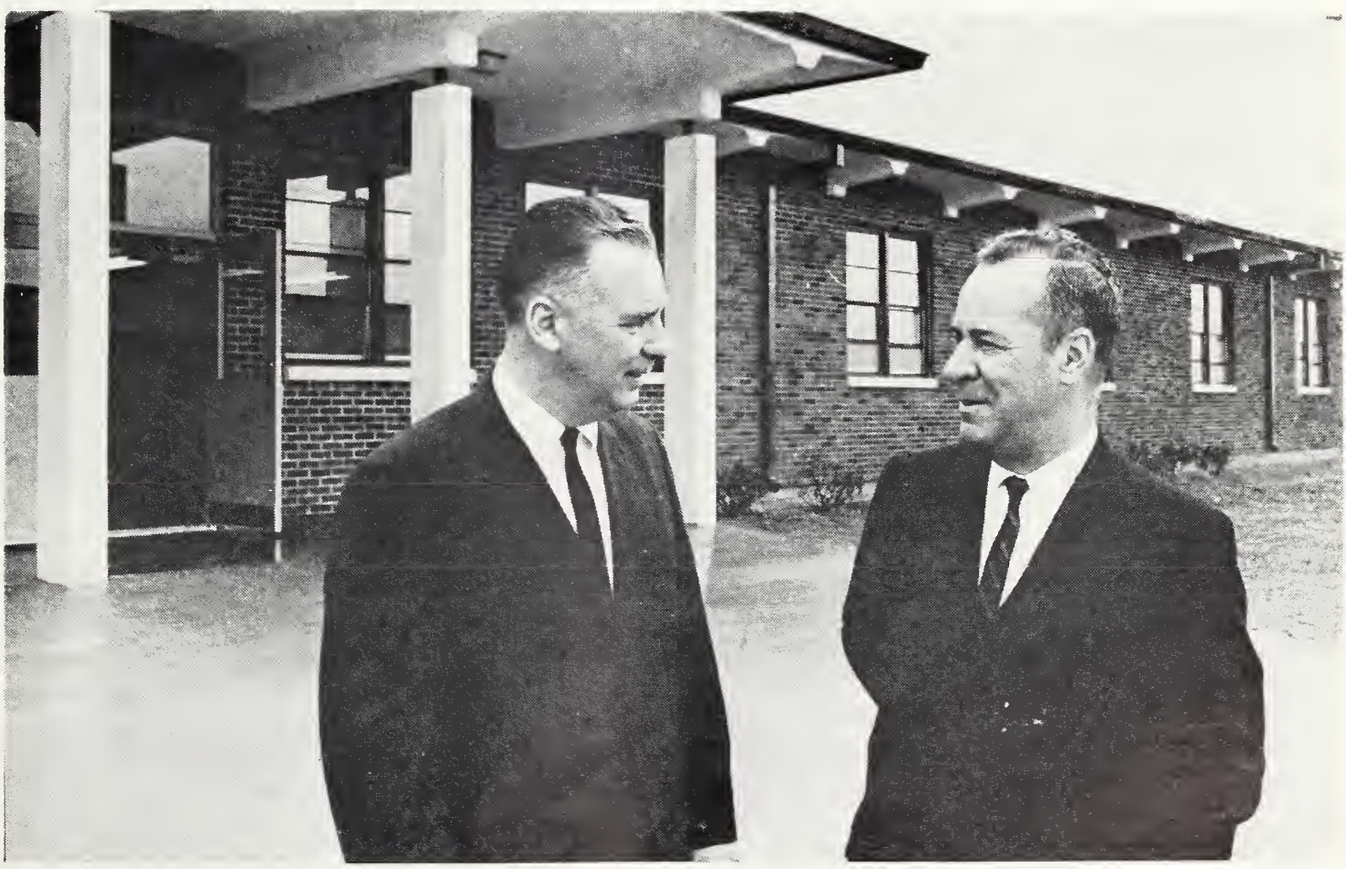
Other program participants were Thomas M. Alewine, chairman, Board of Trustees of Mental Institutions, who served as master of ceremonies, and the Reverend Albert Henry, director, pastoral care department, Mississippi State Hospital.

First occupied in November when Negro retardees were moved from crowded conditions at Ellisville to Whitfield, the new unit includes nine patient buildings, a medical clinical unit, and a building housing a combination dining room and recreational hall.

"The unit is designed for long-range future expansion," said Dr. W. L. Jaquith, director of Mississippi State Hospital. "The recreation hall can be converted into a second dining room as more patients are added."

Dr. Jaquith also observed that the spacious grounds between the buildings can be utilized to build additional patient housing. He said that the modern trend in mental hospitals is to build more auxiliary hospitals and get away from the central unit.

"There were not enough Negro buildings when Whitfield was originally built," he said. "This new unit will help make up for this. We have built with the idea of expansion because there are still 250 Negro retardees on the waiting list that hope to get in in time."



Dedication services were conducted March 12 for the new 11 unit, 900 bed Negro annex at the Mississippi State Hospital at Whitfield. Dr. W. L. Jaquith, right, director of the hospital, and Dr. J. J. Head, assistant director, pause during rounds of the new unit.

Five Guest Essayists Address Cardiovascular Seminar

The tenth annual Cardiovascular Seminar was held March 27 to 29 at the University of Mississippi School of Medicine. The seminar was co-sponsored by the Mississippi Heart Association.

Guest lecturers for the postgraduate course were Dr. Tinsley Harrison, University of Alabama, who also spoke at the annual MHA dinner on March 28; Dr. Mildren Stahlman, Vanderbilt University; Dr. Homer Warner, Foundation for Research in Medical Science, Salt Lake City, Utah; Dr. William H. Muller, Jr., chairman of the Department of Surgery, University of Virginia, and Dr. William Parson, chairman of the Department of Internal Medicine, University of Virginia.

The three-day refresher course was planned by the UMC postgraduate education committee chaired by Dr. Watts R. Webb and by the MHA postgraduate education committee, headed by Dr. Raymond F. Grenfell of Jackson. Dr. Eugene Murphey of Tupelo was seminar chairman and committee members were Dr. Gaines Cooke of Grenada; Dr. T. T. Justice of Gulfport; Dr. George Barnes of Columbus; Dr. C. C. Thompson of Columbia; Dr. F. E. Tatum of Hattiesburg; Dr. R. A. Carsley of Canton; Dr. A. F. Dugger of Waynesboro; Dr. Leroy Brackstone of Corinth, and Dr. O. E. Ringold of Cleveland.

Seminar speakers each read three papers based on their most significant current research contributions. Dr. Harrison's topics were the value, limitation, and abuse of the electrocardiogram; common causes of confusion in the evaluation of chest pain, and problems of digitalis therapy.

Dr. Stahlman spoke on cardiopulmonary adaptation to extrauterine life, the physiology and pathology of the respiratory distress syndrome in the newborn, and an approach toward management of the respiratory distress syndrome.

Dr. Warner chose as his subjects the computer program for the diagnosis of congenital heart disease, the control of cardiac output during exercise, and the effect of exercise on distribution of transit times through the systemic circulation.

Dr. Muller described current concepts of prosthetic cardiac vascular replacement, factors influencing postoperative course of cardiac surgery, and the management of pulmonary hypertension in infants and children. Dr. Parson discussed thyroid and heart disease, aldosterone and hypertension, and newer concepts of the obesity problem.

The seminar was approved by the Mississippi Academy of General Practice for 20 hours credit.

State Thoracic Society Announces 1963 Meet

The Mississippi Thoracic Society will hold its Ninth Annual Meeting in Room 3-A, University of Mississippi School of Medicine on April 18 from 11:00 a.m. to 4:30 p.m., according to an announcement made by Dr. John F. Busey, president.

The scientific program arranged for the 1963 meeting will feature addresses by Dr. Oscar Auerbach, senior medical investigator, Veterans Administration Hospital, East Orange, N. J.; Dr. Donald L. Paulson, clinical professor, Department of Thoracic Surgery, Southwestern Medical School, Dallas, Texas, and Dr. Howard Buechner, chief, Medical Service, Veterans Administration Hospital, New Orleans, La.

Dr. Auerbach will speak on "The Relationship of Cigarette Smoking to Bronchogenic Carcinoma." Dr. Paulson's subject will be "Combined Irradiation and Surgery in the Treatment of Bronchogenic Carcinoma," and Dr. Buechner will discuss "Diagnostic Clues in the Differentiation of Diffuse Pulmonary Lesions."

Membership in the Mississippi Thoracic Society is open to physicians interested in tuberculosis



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"Your problem is just like the one my wife and I had before our divorce."

and other respiratory diseases and conditions. The society, in cooperation with the Alabama and Louisiana Thoracic Societies and Tuberculosis Associations, annually sponsors the Tri-State Consecutive Case Conference.

Any physician interested in attending the 1963 annual meeting of the society is cordially invited. Further information about the annual consecutive case conference may be secured from Judson M. Allred, Jr., executive director, Mississippi Tuberculosis Association, P. O. Box 9865, Northside Station, Jackson.

Immediately following the scientific sessions of the meeting, the society will hold its annual business meeting at Crechale's Restaurant. This meeting will begin at 4:30 p.m.

The Mississippi Thoracic Society serves as the medical section of the Mississippi Tuberculosis Association and acts as the medical advisory board on all medical problems of the Tuberculosis Association.

UMC Schedules Honors Day for April 26

The annual Honors Day, recognizing academic achievement among students in the University of Mississippi School of Medicine, will be on April 26, sponsored by Alpha Omega Alpha honor medical society and the student body.

Among the prizes offered will be a gold wrist watch given by the Mississippi Chapter of the American College of Surgeons for the best research paper by a senior on a surgical subject and a $100 prize by the Mississippi Obstetrical-Gynecological Society to the student whose paper represents the best original work in the ob-gyn field.

Another $100 prize will be given by Alpha Omega Alpha to the student whose research paper is judged superior to all others. Numerous scholarship prizes will be awarded, and members of honor societies and the Dean's Scholars will be recognized.

26,000 Take Polio Vaccine In Natchez Campaign

Around 26,000 residents of Adams County received Type I, oral polio vaccine, during the recent vaccination campaign in Natchez.

The pilgrimage city sponsored Sabin Oral Sunday on Feb. 24 and make-up clinics on March 3. Types II and III will be administered on April 7 and May 19.

The project was a joint effort of the Homochitto Valley Medical Society and the Natchez Junior Auxiliary. Approximately 300 volunteers, including doctors, dentists, pharmacists, nurses, and members of the Junior Auxiliary, worked in the nine clinics.

No charge was made for the oral vaccine, but donations of twenty-five cents per person were accepted to help defray the cost of the vaccine.

Physician members of the project's steering committee were Drs. Robert Barnes, president of the Homochitto Medical Society; Donald Killelea, program coordinator and chairman; Louis Lehman, John Coffey, and W. F. Calhoun.

State Morbidity Reported Through March 1

The Mississippi State Board of Health reports the following occurrence of morbidity for 1963 through the ninth week of the year, ending March 1, 1963. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	28
Tuberculosis, O.F.	1
Salmonella infections	7
Dysentery	
Bacillary	14
Amebic	1
Diarrhea of Newborn	1
Septicemia, Staph.	6
Meningococcus infection	
Meningitis	3
Meningitis, O.F.	5
Mononucleosis, infectious	26
Hepatitis, infectious	168
Helminthic infections	
Hookworm	262
Ascariasis	57
Strongyloides	4
Streptococcus infections	
Scarlet fever	115
Strep throat	615
Pertussis	17
Measles	113
Chickenpox	266
Mumps	197
Other complications of smallpox vaccination	1
Influenza	12,000
Gonorrhea	824
Syphilis	
Early	42
Late	30

AUXILIARY

Mrs. Thuss To Represent AMA at State Convention

Mrs. William G. Thuss of Birmingham, Ala., will represent the Woman's Auxiliary to the American Medical Association at the Mississippi State Medical Auxiliary Convention in Biloxi May 13-15.

Active for many years in the auxiliary, Mrs. Thuss is currently serving as president of the AMA Auxiliary. Mrs. Thuss has served as president of both her county and state auxiliaries. In the National Auxiliary she has served as president-elect, first vice-president and membership chairman, and prior to that, as a regional vice-president.



Mrs. Thuss

She has been associated with many civic and health groups in Birmingham. An organizer and first president of the Visiting Nursing Association, she also has been active on the board of Mercy Home, a child care institution, and the Jefferson County Coordinating Council. She is a member of the American Association of University Women.

Among her other activities are membership on the Board of Directors Jefferson County Association for Mental Health, assigned to the committees on juvenile delinquency and emotionally disturbed children; the education committee of the local unit of the American Cancer Society; charter member of the University Hospital Auxiliary; a member of the Radio-TV Council and Joint Legislative Council of Alabama. She is also a member of the Women's Committee of the President's Committee for the Employment of the Handicapped. She serves on the Presidential Advisory Council of the Girl Scouts.

Dr. Thuss is in industrial practice. He has devoted his practice to occupational medicine and surgery and is director of the Thuss Clinic, which specializes in this field. Two of their three sons also pursue a medical career. Dr. W. G. Thuss, Jr., is an associate professor of preventive medicine and head of the Section on Occupational Medicine at the Medical College of Alabama, Dr. Chauncey B. Thuss is a member of the Medical College of Alabama faculty as instructor in the Orthopedic Service. Robert W. Thuss will receive his master's degree from the graduate school of social work at Tulane University on May 28 and will be working with an agency in New Orleans.

Plans Completed For 40th Annual Session

The 40th Annual Session of the Woman's Auxiliary to the Mississippi State Medical Association will open May 13 at the Buena Vista Hotel in Biloxi.

Mrs. A. T. Tatum of Hattiesburg is currently serving as president of the auxiliary. She will turn over the gavel to Mrs. Mal S. Riddel of Winona at the end of this year's meeting. Mrs. H. K. Rouse of Gulfport is convention general chairman. Other chairmen are Mrs. O. D. Dabbs of Gulfport, luncheon; Mrs. E. T. Riemann, Jr. of Gulfport, decorations; Mrs. J. Hurd Gaddy of Long Beach, registration; Mrs. Eldon L. Bolton of Biloxi, transportation, and Mrs. James H. Deen of Gulfport, publicity.

Monday's activities will include registration and a preconvention board meeting. Tuesday's agenda begins with a continental breakfast given by Mrs. Tatum for auxiliary members. Highlight of the second day's program will be the general session which will conclude with the election of officers. Following the general session the auxiliary will sponsor a luncheon honoring Mrs. William G. Thuss of Birmingham, Ala., president of the Woman's Auxiliary to the American Medical Association. Mrs. Thuss will speak briefly to the group and will conduct the installation of 1963-64 officers.

Wednesday's events will open with the past president's breakfast at which Mrs. John G. Egger, 1961-62 president, will preside. Auxiliary members will then attend the MSMA Seminar on Medicine and Religion. The 40th Annual Session will end with an afternoon tea.

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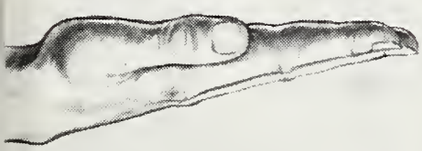
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MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Meeting, June 16-20, 1963, Atlantic City, N. J. F. J. L. Blasingame, executive vice president, 535 N. Dearborn, Chicago 10, Ill.

American Academy of General Practice, April 1-4, 1963, Chicago, Ill. Mr. Mac F. Cahal, Executive Director, Volker Blvd., at Brookside, Kansas City 12, Mo.

International College of Surgeons, North and Central American and Caribbean Federation, 28th Annual Congress, April 21-25, 1963. W. F. James, executive director, 1516 Lakeshore Drive, Chicago 10, Ill.

Southern Medical Association, Nov. 18-21, 1963, New Orleans, La. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham 5, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 13-16, 1963, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Amite-Wilkinson Counties Medical Society, First Tuesday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday Monthly, 6:30 p.m., Robert E. Lee Hotel, Jackson. Jim G. Hendrick, 800 Carlisle St., Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday March and First Wednesday November, 2:00 p.m., Clarksdale. Whitman B. Johnson, Jr., 422 McWilliams Building, Clarksdale, Secretary.

Coast Counties Medical Society. Charles N. Floyd, 1619-23rd Ave., Gulfport, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. Robert M. Graham, 612 Dixie Towers, Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March and September. Robert B. Townes, Jr., 1196 Mound St., Grenada, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. Thomas W. Wesson, 420 Magazine, Tupelo, Secretary.

North Mississippi Medical Society, First Thursday April, and October, Oxford. Marcus E. Morrison, 512 Van Buren Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucien Olen Crosby Memorial Hospital, Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. James C. Bass, Jr., 424-13th Ave., Laurel, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Tom H. Mitchell, The Street Clinic, Vicksburg, Secretary.

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In accepting advertising for publication, the JOURNAL has exercised reasonable precaution to insure that only reputable, factual advertisements are included. Nevertheless, claims made by advertisers in behalf of goods, services, and medicinal preparations, apparatus or physical appliances are understood to be those of the advertiser. Neither sanction nor endorsement of such is warranted, stated, or implied by the association.

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Articles for Publication

Manuscripts should be typewritten, double spaced on one side of the paper. Tables, charts, and tabulations should be submitted on separate sheets but their position in the text should be indicated. Authors are encouraged to limit bibliographies to 10 references, written in conformation to style utilized in scientific publications of the American Medical Association. Articles are accepted for publication on the condition that they have not been previously published and are contributed solely to this JOURNAL.

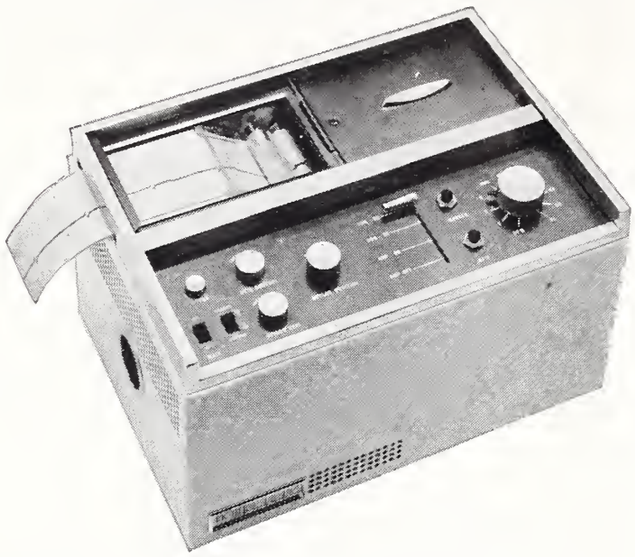
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YOUR VALUE IS UP

Latest sign of the inflated times: The human body, once chemically price-tagged at 98 cents, is now worth $34.54 as a source of chemicals. The comforting estimate is based on a new Chemical and Engineering Price list report on present value of chemical compounds. *The breakdown:* One of the costliest elements in the body is potassium; a 150-pound man has four ounces of it in his body —now worth $6.06. Years ago, you could get it for pennies. Calcium, three pounds of it in the average human, would also fetch a good price on the current market—$4.50 in its pure metallic form. (Drawback: As calcium phosphate, it's worth only 8 cents a pound, or 24 cents for the body's total supply.) According to the chemists, there's enough lime (calcium) in the body to whitewash a chicken coop, enough carbon for 9,000 pencils, phosphorus for 2,200 matches, fat for seven cakes of soap, iron for one very small nail, and magnesium for a good stiff dose of salts. And the chemists have one more reassuring word for the human race: For all the cheapness of construction materials, the body is still the world's greatest laboratory, able to perform instant chemical feats that would take hours or days in an ordinary plant. —*The Insider's Newsletter*

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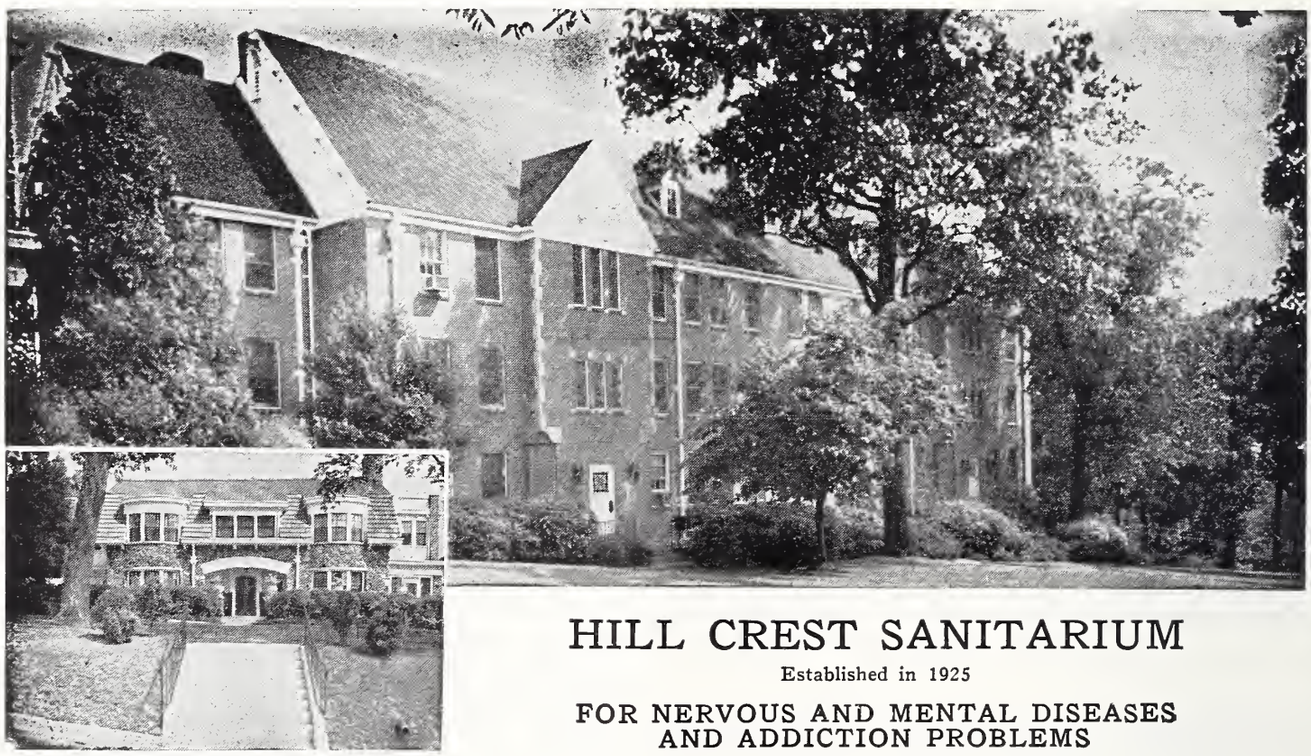
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NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION
JACKSON, MISSISSIPPI

May 1963

Dear Doctor:

Tennessee's last angry man who can't take no for an answer is after the U. S. pharmaceutical industry again. Senator Estes Kefauver has reintroduced his bill for compulsory licensing of drug patents, denying developer and owner exclusive right to manufacture of product after three years. Present patent law is for 15 years.

> Identical measure failed in Congress last year, despite Kefauver's pillorying of drug industry. New measure would force licensure to competitors at maximum royalty of 8 per cent if and when federal government decides developer of drug is making too much profit. New bill is S. 1257.

Newest unlammented vanishing American will be the phony TV doctor and dentist hawking pain pills, laxatives, and dentifrices. National Association of Broadcasters amended code to eliminate medical and dental pitchmen effective July 1. Also to disappear from TV screen are "medical implications," such as stethoscopes and Rx pad props in commercials.

The recently organized Commission on Drug Safety has initiated publication of a newsletter to inform the scientific community of its activities. Made up of respected leaders in pharmaceutical, educational, research, and medical organization fields, the commission says it will be only authoritative group to which government and industry can turn on matters of drug safety.

Ophthalmologists who supply glasses to patients have won their fight to keep dispensing ethical. AMA's Judicial Council, who ruled against practice last year, will back down at June annual session in Atlantic City. Curious irony is that similar decision of Judicial Council was reversed at 1955 AMA session, also at Atlantic City.

North, south, east, or west, all Mississippi roads lead to Biloxi and the 95th Annual Session, May 13-16. Big meet features 53 speakers, 58 exhibits, House of Delegates, alumni reunions, and fun in the sun. Auxiliary meets May 13-15, making event real family affair.

Sincerely,

Rowland B. Kennedy
Executive Secretary



TODAY'S HOSPITAL...
CAREER CENTER
FOR
AMERICA'S YOUTH
NATIONAL HOSPITAL WEEK MAY 12-18

DATELINE - MEDICAL AMERICA

Accidental Poisonings Are On Upswing In Mississippi

Jackson - Twice as many Mississippians die each year from accidental poisoning as from diptheria, polio, typhoid, measles, and scarlet fever combined. Stressing importance of Poison Prevention Week which was recently observed, State Board of Health said annual increase in such deaths was now 32 per cent. Of more than 10,000 injuries and illnesses from accidental poisoning in 1961, 40 Mississippians died.

UT Medical Leadership Protests Federal 'Chains' On Grants

Memphis - The University of Tennessee's medical dean, M. K. Callison, and the vice president of the UT Medical Units, H. F. Marsh, have protested growing federal controls and red tape regulations over government-financed research projects at the giant school. Memphis Commercial Appeal editorialized that "wherever the federal government goes, federal controls go with it," pointing out that UT, which gets 55 per cent of its income from government, shouldn't be surprised.

Swiss Typhoid Outbreak May Be Health Scandal Of 1963

New York - Informed observers believe that as many as 1,000 typhoid victims contracted the disease at the Swiss ski resort of Zermatt when February outbreak closed hotels and scattered 7,000 tourists all over Europe. Real scandal in the making, however, is fact that epidemic actually started last year - not in February when peak was hit. Doctors in Zurich and Neuchatel reported cases before end of 1962 but officials allegedly surpressed facts for fear of hurting tourist business. Strangest aspect of all is fact that World Health Organization is headquartered in Switzerland.

Toxic Tuna Shoots Scare Through East

Brooklyn - Public health officials in eight states ransacked grocery and restaurant shelves during the Passover-Easter period searching for E botulism-contaminated canned tuna. Fish was traced to Washington Packing Co., same processor said to have canned A&P tuna responsible for deaths of two Detroit women in March. Recent episode involved brand distributed from Brooklyn with can codes WY2 and WY3. Public health officials also found botulism taint in same packer's cat food.

Isotope Teletherapy Licensure Grows In U.S.

Chicago - The American College of Radiology reports that more than 450 radiologists, hospitals, and special institutions are now licensed for radioisotope teletherapy. Most units are cobalt-60 machines using over 1.1 million curies of AEC-distributed isotopes but records also show licensure of 24 installations using cesium-137. Mississippi is one of five states controlling its own licensure.

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
May, 1963, Vol. IV, No. 5

ORIGINAL PAPERS

Side Reactions to Cortisone Therapy In the Treatment of Rheumatoid Arthritis

RUSSELL L. CECIL, M.D.
New York, New York

The author, best known for his famous Textbook of Medicine, *discusses the minor and major effects of cortisone therapy in arthritis. He considers management of undesirable side effects and concludes with a short discussion on the total effect of long-term therapy with corticosteroids. Dr. Cecil, a pioneer in the treatment of arthritis, established one of the first arthritis clinics in the country in 1922 and was one of the first physicians in the United States to use gold salts some 25 years ago.*

SIDE REACTIONS to cortisone therapy in patients with rheumatoid arthritis seem to occur with much more frequency than they do in other conditions which are similarly treated. It is customary to divide these side effects of cortisone therapy in arthritis into two groups, known as the minor effects and the major effects.

MINOR EFFECTS

The minor effects of cortisone therapy in rheumatoid arthritis can be seen in any patient with Cushing's syndrome. One of the first to appear is the abnormal deposit of adipose tissue, particularly around the face and neck. This rounding of the face is usually spoken of as the "moon face." Then there is the "buffalo hump," a mass of fat which appears in the region of the lower cervical vertebrae. One also sees at times superclavicular fat and increased abdominal girth. This fat deposit should be differentiated from the obesity of a general type which results from the increase in appetite these patients experience when on steroid treatment.

Abnormal hair, or hirsutism, is noticed not only on the face but sometimes on the body as well. This may be accompanied in some cases by acne. Ecchymoses and small petechial hemorrhages are quite common, and after long-continued dosage with cortisone, they may be profuse and of large size.

Nervous and emotional disturbances, particularly insomnia or restlessness, euphoria, depression, and agitation, are frequently seen. Most of these are of trivial character and not particularly important; they should not be allowed to interfere with the use of the drug if there are strong indications for it. Insomnia and restlessness are easily controlled by sedatives. Euphoria, of course, is a very pleasant phase of the treatment.

Glycosuria is rarely of any importance, though I have seen a few cases of mild diabetes where cortisone intensified the diabetic picture and necessitated larger doses of insulin. Edema of the ankles and feet is a common finding in rheumatoid ar-

Consulting Medical Director, The Arthritis and Rheumatism Foundation.

Read before the Section on Medicine, 94th Annual Session, Mississippi State Medical Association, May 7-10, 1962.

thritis even when cortisone therapy is not being employed. It may be quite troublesome when the patient is on standard dosage of cortisone drugs.

Vascular hypertension is seen more frequently in patients who have been treated with injections of corticotropin (ACTH); however, this is rarely an important complication. Cardiac symptoms such as arrhythmia or even congestive failure are sometimes encountered but, according to Bunim,[1] are rarely seen in patients treated with triamcinolone, methylprednisolone, or dexamethasone.

Menstrual disorders may occur, but this, too, is not an important or frequent occurrence. In the same category one should mention accentuated menopausal symptoms, such as sweats and hot flashes.

The synthetic steroid compounds such as prednisone, prednisolone, and triamcinolone increase the anti-inflammatory response in the patient's joints and decrease the salt-retaining effect and other actions of the naturally occurring steroid. Since these compounds simulate the action of the normal adrenocortical steroids, it follows that prolonged higher dosages will produce signs and symptoms of hyperadrenalism, better known as Cushing's syndrome. However, these minor reactions do not necessitate withdrawal of streoid therapy, though they may require reduction in the dosage.

MAJOR EFFECTS

The minor side effects of cortisone therapy have little significance so far as treatment is concerned. It may mean cutting down dosage—nothing more. However, when we come to the major effects, these can often be of a serious and even fatal nature.

GASTROINTESTINAL SYMPTOMS

The hyperacidity which is noted in some cases can be uncomfortable, but the real problem so far as gastrointestinal side effects are concerned is peptic ulcer, which is reported to occur in 5 to 20 per cent of all cases. In Ragan's series[2] of 68 cortisone-treated patients observed for more than four years, the incidence was 26 per cent. In other series it has varied from 17 to 25 per cent. Ulcers may appear early during the first weeks of steroid therapy, but this is unusual. The ulcer is more apt to make its appearance after several months of treatment. They may be asymptomatic or on the other hand they may perforate or bleed severely without warning. In Ragan's series[2] there were 11 deaths due to steroids, two of which were due to bleeding peptic ulcer and one to perforation. In Bunim's series,[1] eight deaths occurred because of cortisone therapy. Two were caused by hemorrhage from peptic ulcer.

One should always be on the lookout for symptoms of early ulceration in the stomach. This means inquiring about hyperacidity, pain in the epigastrium, frequent blood counts, and examination of the stool for occult blood. With any appearance of suspicious symptoms, x-rays of the stomach and duodenum should be made, and if an ulcer is discovered, there should be a rapid reduction or even discontinuance of steroid therapy. The use of antacids prophylactically in all patients receiving corticosteroids is advised by some but does not always prevent ulceration.

OSTEOPOROSIS AND FRACTURES

The second commonest major threat of cortisone therapy is spontaneous fracture in the vertebral bodies of the dorsal and lumbar spine. The ribs may also undergo fracture and less often the pelvis or long bones. The incidence of spontaneous fracture ranges from 9 to 15 per cent of cases. They occur primarily in women, usually above the age of 50, and in those who have had rheumatoid arthritis for longer than ten years and steroid therapy for more than six months. Osteoporosis occurs frequently in women at the age of menopause, particularly in those who have suffered from rheumatoid arthritis. However, spontaneous fracture seems to be the result of cortisone therapy, as it rarely if ever occurs in those who are not on this form of treatment.

There is some question about the value of estrogenic and androgenic therapy for preventing or for treatment of patients with marked osteoporosis and fracture, but most rheumatologists make use of the combined hormone sex glands.

PSYCHOSIS

The third most frequent of the major complications are the psychoses which occur in about 5 per cent of the patients receiving long-term cortisone treatment.

Bunim[1] states that this complication rarely occurs with triamcinolone, methylprednisolone or dexamethasone, and as a matter of fact in the author's experience, psychosis occurred chiefly with cortisone, hydrocortisone, or prednisone. The reaction of psychosis usually takes the form of suicidal intent or protracted depressive reactions. Usually the occurrence of these mental complications is unpredictable and in general seemingly unrelated to dosage. The drug should be dis-

continued when symptoms of severe depression occur.

INFECTION

Infections of various kinds have been known to occur during cortisone therapy, including tuberculosis, pneumonia, meningitis, bacteremia, and various fungal infections. Some of these have been fatal. Corticosteroids play no role in initiating infection, but they may promote activation of a latent focus or spread of an active infection. Furthermore they often mask symptoms and thus prevent recognition of the infectious process. Strangely enough, situations occur in tuberculosis, pneumonia, and other infections where corticosteroid therapy may be actually beneficial if used in connection with the appropriate antibiotic. The mechanism of this sort of combination is not understood.

NECROTIZING ARTERITIS

For a long time it has been recognized that periarteritis could occasionally occur in combination with rheumatoid arthritis; this is true also of polyarteritis nodosa and lupus erythematosus. Since the introduction of steroid therapy, however, the occurrence of inflammatory vascular lesions in cortisone-treated patients with rheumatoid arthritis seems to have become more prevalent and more malignant in character. In severe cases a true necrotizing arteritis takes place; there may be neuritis or even gangrene. The treatment of this complication is the gradual reduction of steroid dosage. The whole picture is confusing for the simple reason that corticosteroids are often used with benefit in the treatment of both periarteritis nodosa and lupus erythematosus, conditions which are frequently associated with arteritis and periarteritis. Fortunately this complication—often fatal—is seen only in patients who have had steroid therapy over a long period of time.

THROMBO-EMBOLIC PHENOMENA

Thrombophlebitis and thrombo-embolic phenomena have been reported rather frequently in patients with rheumatoid arthritis who are on steroid therapy. The percentage of incidence is about 1 to 2 per cent. Several deaths from pulmonary embolization have been recorded.

LONG-TERM THERAPY

The total effect of long-term therapy with corticosteroids is rather unpredictable. There are a few fortunate people who can take the drug month after month and year after year without any visibly untoward effect. In the majority of cases, however, the long-term effect of steroids is unfavorable, particularly if the doses have been up to standard size. The general effect of long-term use of steroids, in addition to the specific serious side effects mentioned above, consist of general weakness, mental depression, and gradual development of tolerance making larger doses necessary to achieve the same effect. Eventually even large doses fail. The joints become much more actively inflamed, and the unhappy patient has to be hospitalized for gradual discontinuance of the drug. This weaning process is an unhappy one for both the doctor and the patient. However, it becomes absolutely necessary in a good many patients, and for this reason most rheumatologists use the corticosteroids today with considerable reluctance, realizing that in spite of their brilliant effect they eventually have to be discontinued. Most of these symptoms can be explained in part by loss of potassium or by exhaustion of the adrenal gland. Whatever the cause, the end result is a sad one and much to be avoided if possible. ★★★

449 East 68th St.

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AUTOLOGY

Organizers of the brand-new International Auto Show in New York have devised a guide to the people who throng such exhibitions. If the visitor lifts the hood to examine the engine, he's a German; if he checks the upholstery, he's British; if he appraises only the exterior body lines, he's French; the horn-honker is Italian, and he who checks the size and price-tag is—you guessed it—American.

—The Insider's Newsletter

The Pelvic Pressure Syndrome

JAMES L. ROYALS, M.D.
Jackson, Mississippi

The complaint of pelvic pressure may be caused by a wide range of disorders from grossly inadequate support to frankly psychosomatic problems. The author discusses the etiology and treatment of abnormal pelvic pressure and concludes with a short discussion of the patient whose complaints are largely psychosomatic.

GYNECOLOGISTS OFTEN HEAR these complaints: "Doctor, I have so much pressure in my pelvis"; "There is an abnormal amount of rectal pressure"; "When I am on my feet for any length of time, it feels as though everything is falling out." When we examine these patients, some will have findings of grossly inadequate support or malposition. Many, on the other hand, will have physical findings which will be minimal in contrast to the severity of the symptoms. And, in an occasional one, no abnormalities of support or position will be found. Almost all patients who complain of this type of pelvic pressure feel excessive fatigue. In considering the etiology of abnormal pelvic pressure, some understanding of the physiology and pathology of pelvic support must be had.

Whether the muscles or the fascia provide the main support of the pelvis has been the subject of many classic arguments. In recent years, however, it has been clearly shown that the muscles of the levator sling provide the principal support of the pelvis, and, in truth, in the young nulliparа the so-called pelvic fascia is little more than areolar connective tissue and should not be thought of in the same sense as the fascia elsewhere, such as the sheath of the rectus muscle. In the breakdown of muscular support, it will be shown that this pelvic connective tissue is capable of great thickening and secondary supportive functions.

It seems desirable to think of the levator ani muscle, in its undamaged state, not as a sling but rather as a muscular plate giving firm but elastic support to the pelvis and absorbing the forces of intra-abdominal pressure. In response to increases of intra-abdominal pressure, the levator ani muscle is capable of strong contraction which almost completely closes the genital hiatus. Intact levator ani muscles provide excellent support, and it is not necessary to utilize any other form. In this normal, nonparous state, the vagina does not lie in a steep, oblique course, as shown in many gynecologic textbooks, but is almost horizontal and lies parallel to the levator muscle.

Faced with increasing intra-abdominal pressure and faltering integrity of the levator ani—either from trauma, malnutrition, faulty enervation, or genetic factors—the levator plate then becomes more a sling, running an increasingly oblique course which becomes almost vertical in the severe cases, thereby enlarging the longitudinal and transverse diameters of the genital hiatus.

Since it is quite rare that the genital hiatus ever resumes nulliparous dimensions after a vaginal delivery, it must be assumed that parturition produces irreparable damage to pelvic support. Those muscle fibers which originate at or near the pubic bone, pass around the posterior aspect of the vagina, and terminate anterior to the rectum are most frequently damaged. Deeper muscles of the levator group may also be damaged and, if not repaired, will further weaken the integrity of the levator sling, throwing more of the support on pelvic connective tissue which in turn thickens in an effort to carry the load but which notoriously attenuates under constant pressure. With enlargement of the introitus and widening of the hiatus,

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much of the responsibility for uterine support is placed on the anterior vaginal wall. We have all seen the anterior vaginal wall, a thin elastic structure in the nullipara, become thickened in the multipara with a gaping introitus. It is not unusual during the repair of a cystocele to find the anterior vaginal wall as much as a centimeter thick. This abnormal thickening and strengthening of the anterior vaginal wall overlaps the remaining, effective part of the levator sling, to produce the support of the pelvis. This teamwork of overlapping structures is frequently referred to as the pelvic valve.

PELVIC VALVE

A pelvic valve occasionally forms in nulliparas. This usually occurs postmenopausally and is related to diminution of muscle mass and tone which allows the levator plate to sag into a sling, enlarging the hiatus and shifting some of the load to the anterior vaginal wall which then becomes hypertrophic as described before. This same mechanism can occur in the premenopausal nullipara if there is a defect in the nerve supply to the levator.

Permanent retroversion of the uterus complicates the problem of pelvic support when enlargement of the hiatus has occurred. Such retroversions are always accompanied by significant anterior displacement of the cervix. This anterior migration of the cervix is made possible only by an elongation of the cardinal ligaments. The axis of the uterus then points down the axis of the pelvic valve and acts as a leading wedge. The cardinal ligaments hypertrophy in the face of this tension but will gradually give way under continued pressure. Often the fundus of the uterus rests on the intact part of the levator sling and will be supported, while the cervix is anterior to the sling and will attenuate for lack of support. This is usually the explanation for an elongated cervix.

Lastly, an enterocele forms when there has been a congenitally deep cul-de-sac under which the levator sling has lost supportive power by enlargement of the hiatus. With an anteverted uterus, the intra-abdominal forces attenuate the cul-de-sac down the pelvic valve and through the hiatus.

The foregoing is a brief review of the physiology of pelvic support and of its breakdown. When the supporting forces begin to weaken, there is a gradual dropping of pelvic organs. When there is a moderate-to-marked dropping of pelvic organs, it is easily understood why a patient feels as if everything is falling out, because this in a sense is actually occurring. It is not the intention of this paper to discuss the correction of these gross prolapse problems, most of which lend themselves to good, corrective surgery; rather, it is that group of patients who have little or no demonstrable evidence of descensus, yet who complain of uncomfortable pelvic pressure, which we will consider.

Whenever there is even a slight degree of pelvic descensus, there is a lowering of the geometric plane of the uterus and adnexa, with a resultant stress on the circulatory system of the pelvis. This resultant stasis involves primarily the venous side, which already is without valvular control within the plexus of the parametria, and causes the formation of massive varicosities throughout the pelvis. This circulatory defect often results in altered physiology of the uterus and ovaries, with resultant aberrations in the menstrual pattern. This vascular congestion causes very real symptoms of pressure and weight in the pelvis and pain in the lower abdomen and back. It also produces tenderness in the abdomen and pelvis. These symptoms of pressure in the pelvis give rise to an exaggerated sense of fatigue and emotional tension; and it is easy, in the absence of any gross physical findings, to dismiss these complaints as emotional in origin.

CONGESTED-PELVIS SYNDROME

The congested-pelvis syndrome was first described in three papers by Taylor in 1949. Several other good papers on this syndrome have since appeared, but for several reasons it has failed to materialize as a strong clinical entity. This is due in part to the difficulty of making a positive preoperative diagnosis. In most instances, the diagnosis is apparent only at the time of surgery, when broad sheets of varicosities are found in the broad ligament and beneath the bladder, and, in hindsight, we realize this to be the cause of the pelvic pain and pressure of which the patient complained. Angiography would reveal the varicosities, but this technique has hardly progressed beyond the investigative stage. Some authors state that a slight thickening of the parametria is to be found in this syndrome, but this finding has not been definite enough to be of much help to me.

Retroversion of the uterus to some extent creates a stasis of the circulation which probably, in part, explains the symptom of backache and pelvic pressure, even in a nullipara. In symptomatic retroversion, a well-fitted pessary will demon-

strate the cause of this complaint and suggest a therapy. A well-fitted pessary will also relieve symptoms from pelvic congestion even when the uterus is in the normal, anterior position. In a patient who complains of pelvic pressure and low abdominal pain which gets worse at menses, and in whom no significant pelvic findings are made on examination, it is worthwhile to try a pessary. If there is marked relief while the pessary is being worn, followed by a return of the symptoms within a month after removal, pelvic congestion is a likely possibility.

If it can be determined with reasonable satisfaction that the cause of pelvic pressure is pelvic congestion, and if there is no significant psychic overlay to grossly exaggerate the symptoms, some kind of supportive procedure is indicated. In the mild cases, pelvic exercises offer real hope of relief.

PELVIC EXERCISES

The value of exercising the levator is nicely demonstrated by the patient who, despite an old, unrepaired, third-degree perineal laceration, has learned to achieve bowel continence by tightening the levator. In spite of this massive damage to the pelvic supporting structure, these patients almost always have good pelvic support because, in tightening the levators to achieve bowel control, they increase levator muscle mass and tone and thereby enjoy the secondary benefit of good support.

This same benefit can be achieved by patients with mild-to-moderate support problems with a regular, conscientious routine of pelvic exercises. Most of your patients will need to have the exercises demonstrated. This can be done at the time of pelvic examinaton, by putting the levators on stretch and asking the patient to contract these muscles. We have found that fully half the patients don't know how to contract them, but they can learn in a few moments to contract them voluntarily; and after a few weeks of practice they will be found to have strong contracting ability. In the interest of prophylaxis, we are now instructing all our postpartal patients in the technique of pelvic exercises at the six-weeks examination.

In the symptomatic patients who are unable to achieve comfort through pelvic exercises, some surgical procedure is indicated. These procedures will range from vaginal repair, to internal supportive operations, to total hysterectomies, the choice being individualized to the patient's needs.

PSYCHOSOMATIC COMPLAINTS

We must keep in mind that in most women psychosomatic complaints focus themselves in the pelvis and often assume the forms of pelvic pressure and pain. Extensive pelvic surgery on these patients will cure nothing. The patient will simply transfer the focus to another area and, thus, we have tension headaches and spastic intestines to treat.

We are quite likely to be misled by the patient who comes in for the postoperative checkup and tells us she has never felt better. It seems that the psychosomatic patient is most likely to come in with this kind of report. We all want our patients to feel this way about our treatments and surgery; but when they come in at six weeks and are almost too enthusiastic about how good they feel, I become a little suspicious. These patients have been at home under the loving protection of their husbands, family, and friends. They have been carefully guarded from the responsibilities of wifedom, motherhood, and society; and, if their basic problems have been caused by these very forces, it is natural that they would be enthusiastic about their recovery. Dr. Oschner used to say, "The proof of the pudding is not in the eating but in the digesting thereof." The six-weeks postoperative checkup visit is the eating stage. The digestion comes about a year later when they again have upon them the responsibilities of being a wife, mother, perhaps a jobholder, and a member of a society full of pressures. If they still tell you they feel fine, you can know you operated for something physical and corrected it. However, if they are calling you for tension-headache pills, antispasmodics, or tranquilizers, you might well wonder if your surgery was wisely done.

Identifying the patient whose symptoms are largely psychosomatic is tricky business and often is done almost intuitively. Spending enough time with the patient, usually through repeated visits, to evaluate the whole personality and assess her reactions to the forces with which she lives is essential to an accurate diagnosis. I am not advocating that we all become junior psychiatrists, but we must recognize the importance of the part played by the emotions in creating and affecting pelvic symptoms, so that we may avoid treating emotional problems with surgery. ★★★

918 North State St.

Bone and Joint Trauma Resulting from Automobile Accidents

GRIFFIN BLAND, M.D.
Gulfport, Mississippi

The physician holds a two-fold duty in regard to automobile accidents. As a clinician, he has the responsibility of caring for accident victims. As a citizen, he has the responsibility of working to provide more safety factors in automobile usage. The author discusses general aspects of automobile accidents and considers specifically bone and joint trauma resulting from traffic accidents.

THE FIRST RECORDED fatal motor vehicle accident involved a man struck by a car as he stood beside a streetcar.[1] Today, such a report would go almost unnoticed, because we are accustomed to more serious accidents involving more individuals. Yet, there is tragedy enough for the involved individual and his family. Figures indicating decreasing percentages of automobile accidents relative to the numbers of vehicles and number of vehicle miles are not very consoling.

MISSISSIPPI'S RANK

Mississippi ranked fifth from the top in traffic deaths per one hundred million vehicle miles in 1960, according to National Safety Council statistics. The state was tenth from the top in deaths per one hundred thousand population.[2]

No one element can be pointed to as the causative factor in automobile accidents. Poor roads, ambiguous traffic signs, mechanical failures, and careless pedestrians must all share the blame. However, most serious accidents involve some form of driver failure. This fact makes strict driver examinations and re-examinations and enforcement of driver responsibility laws doubly important.

Speed and failure to yield the right-of-way are contributing factors in most accidents, and most fatal accidents occur on the weekends.[2] Of all motor vehicle traffic accidents in 1960, 71.8 per cent occurred on dry roads with 81 per cent of the fatal accidents occurring on dry roads.[2] In the same year, nearly three-fourths of the deaths occurred in rural areas and involved mainly occupants of automobiles. Over half occurred in night accidents.[2]

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A recently reported study of pedestrian fatalities in Manhattan Borough for an 18-month period showed that alcohol and age were the two more readily identifiable characteristics of the subjects.[3] Studies by McCarroll and Hadden[4] and Hadden et al.[5] showed three-fourths of all New York City accidents include alcohol as a factor.

ALCOHOLIC INTOXICATION

The physician examining an intoxicated person should always record his opinions. The legal interpretation of "alcoholic intoxication" rests with the vagaries of the laws and courts. In most states, individuals are legally "under the influence" at a blood concentration of alcohol of 0.15 per cent or above.[2] Many feel that this level is too high. Research has indicated impaired driver ability in most individuals at 0.05 per cent (or following two to three average drinks).[2] Some authorities believe the figure officially indicating "drunken driving" should be reduced to at least 0.05 per cent. In one series of cases of 2,795 fatally injured drivers, 61 per cent had been drinking, and in 2,307 of these, there were 58 per cent with blood alcohol levels of 0.05 per cent or higher.

The Massachusetts Medical Society's Committee on the Prevention of Traffic Accidents has reason to believe that the drinking driver may be responsible for the majority of fatal accidents.[4]

Automobile safety devices are slowly becoming realities. Properly installed, safety belts and door locks may possibly save 856 lives per year, according to one recent study.[7] The more efficient door locks were introduced on new cars in 1956. It is possible that they may be responsible for saving more lives than seat belts.[5] However, combining the two safety devices is certainly desirable. The belts can prevent many severely crippling injuries which result from displacement of the passenger within the automobile. According to Cornell University Medical College statistics, the chances of avoiding death or serious injury are at least 60 per cent better with seat belts than without. Shoulder harness for front seat riders also increases the safety factor.[8]

SERIES OF 299 CASES

In the Memorial Hospital at Gulfport, with an average bed capacity of 136, there were 1,052 individuals admitted with fractures during the calendar years 1956 through 1960. Only 996 of these cases could be evaluated as to cause and degree of injury due to inadequate recording of data. Of these fracture cases, 299 or 30.2 per cent were involved in automobile accidents. Fifteen, or 5 per cent, of these died in the hospital. Two more are known to have died as a result of their injuries. At least six more deaths occurred as a result of the accidents involving the 299 individuals. These figures do not include outpatients treated for fractures nor those dead on arrival as a result of automobile and other accidents.

The emergency treatment of bone and joint injuries generally involves careful examination. Gentle handling and adequate splinting reduce morbidity and mortality. Evaluation of associated soft tissue injuries, especially injuries of the viscera, and evaluation of blood loss are important and may be lifesaving.

Most cervical spine injuries result from rear-end collisions with sudden hyperextension, followed by flexion of the neck. This produces strain of the ligaments and muscles and, rarely, fractures or herniated discs. Most serious fractures and fracture-dislocations occur with the head-on collisions or those causing the passenger to be thrown from his seat. Head rests and seat belts might prevent many of these injuries. Fracture-dislocations may require immediate skeletal traction. Various aids to respiration, such as tracheostomy, may be lifesaving.

SPINAL INJURIES

Dorsal and lumbar spine injuries, usually compression fractures, result from the occupant's being thrown from his seat. Direct blows may fracture transverse processes. Herniated disc may occur and can cause serious spinal cord damage. Transportation to hospitals should be gentle, and no attempt to flex or hyperextend the back should be made. Either movement may result in serious cord damage.

Lacerated spleens, livers, aortas, and other viscera must not be overlooked. Laceration of the aorta may cause immediate or delayed sudden death. In one series of 200 fatal pedestrian-automobile accidents, 83 had abdominal injuries. The authors stated that laceration of the liver was responsible for over one-half of the 83 deaths.[3] The same authors emphasized that external evidence of injury may be minimal or absent.

Rarely, sacral fractures may result in gross displacement of the fragments. Cauda equina injuries and hemorrhage may be serious. Manipulation can be done through the rectum if one is careful not to traumatize soft tissues. The prognosis relating to the return of function is guarded.

Almost any fracture or combination of fractures may result in the upper extremity. Car window fractures of elbows are becoming less common. This is probably due to drivers being more accustomed to cars without projecting fenders and running boards, as well as the lower seats and the provision of arm rests for drivers.

The Colle's fracture and various hand and wrist fractures are fairly common, especially in drivers. In the hand and wrist, it is important to remember that initial careful treatment may determine the outcome. If possible, the hands should be kept mobile.

Painful clavicular fractures usually respond to conservative treatment. They are sometimes associated with injuries to the adjacent nerves and vessels. Subclavian vein thromboses have been reported following clavicular fractures.[7] The shoulders should be kept mobile. Stiffness following inactivity of shoulders can be painful and disabling.

The passengers remaining seated in a front or side collision are prone to get lower extremity fractures. In my small series of 551 fractures in 299 individuals, fractures of the tibia (83) predominated. (Multiple rib fractures in any given individual were tabulated as "rib." Segmental long bone fractures were recorded as one fracture.) Femoral (64) and fibular (59) fractures were respectively second and third in incidence. The force-producing fracture is transmitted either through foot and leg to thigh and pelvis or through the patella to femur to pelvis. Sprains and fractures of the foot and ankle, as well as ligamentous and cartilaginous derangements of the knee, may occur. The explosive force may be abruptly dissipated in any of the above bones.

Fractures of the long bones, especially the femur, should be immobilized and handled as little as possible to minimize traumatic shock and fat embolism. Most serious fractures of the patella should be definitively treated by open reduction.

Fractures of the acetabulum with dislocation of the hip, or dislocation without fracture, should be reduced immediately to help prevent avascular necrosis of the femoral head and possible damage to the sciatic nerve. This can frequently be accomplished without anesthesia by gentle manipulation with the patient prone and the hips and knees flexed. Traction should follow. Open reduction, if indicated, can wait.

Fractures of the pelvis occur frequently in passengers thrown from seats and in pedestrians. Soft tissue injuries may be severe and not immediately apparent. Urological examination is indicated and a urinalysis always required. Blood loss should be carefully evaluated. Retroperitoneal hemorrhage has been reported to cause death from blood loss in a significant number of unrecognized pelvic fractures in pedestrians.[3] Occasionally, open reduction of pelvic fractures is indicated. Usually, conservative care suffices.

Pedestrians suffer a variety of injuries, due to externally protruding automobile parts—for example, bumper fractures of legs and knees. However, most of their severe injuries are due to the sudden dissipation of force within the body and striking other objects, such as pavements, as they fall.

VICTIM'S RESPONSIBILITY

One series of fatal pedestrian injuries indicated the victim was responsible for the accident in over three-fourths of the cases. Thirty-three per cent had alcohol in the brain. The postmortem examinations were done as long as 24 hours after injury.[3] Thus, one can see that in many cases the alcohol might not be detected at postmortem, thus increasing the percentage. The age distribution of the victims was interesting. More were under 10 years of age than between 10 and 50. But, the largest single group was comprised of those over 50 years of age.

In summary, this paper has attempted to show that physicians hold a double duty in regard to automobile accidents. As clinicians, they have the responsibility of evaluating and treating accident victims. As citizens, they must work to provide more safety factors in automobile usage. ★★★

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Radiologic Seminar XIII: Pancoast or Superior Sulcus Tumor Syndrome

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DR. H. K. PANCOAST in 1924[1] and again in a more detailed 1932[2] article called attention to the clinical and pathological findings associated with a malignancy involving the apical portion of the lung and the adjacent tissues of the mediastinum and base of the neck. The classical clinical syndrome, as he initially described it, consisted of pain in the shoulder extending down the inner aspect of the upper extremity, along with atrophy of the muscles of the hand and a Horner's syndrome. The radiologic findings included a relatively small homogeneous density at the apex of the lung, with adjacent rib or vertebral destruction.

Today it is felt that most of these tumors actually represent peripheral bronchogenic carcinomas and that for some unknown reason such tumors in this location have a tendency to invade the chest wall by direct extension. On occasions other types of malignancy may produce the same picture.[3] The clinical pattern, as described by Dr. Pancoast, has remained essentially unchanged over the years. The severe nature of the pain often makes clinical management difficult, and the cure rate with present methods of therapy is essentially zero.



Figure 1. Routine chest film on a 47-year-old white male with a five months' history of left shoulder and upper extremity pain, along with a Horner's syndrome. Note the typical opacification in the region of the left apex. Biopsy revealed a poorly differentiated squamous cell carcinoma.

Routine chest films in this entity reveal a homogeneous soft tissue density involving the apical portion of the lung. This can be differentiated from the relatively common so-called apical pleural cap by the extent of the process (Figure 1) and the fact that the latter is usually asymptomatic. Peripheral bronchogenic carcinomas occur-

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From the Department of Radiology, University of Mississippi School of Medicine.



Figure 2. Routine chest film on a 48-year-old Negro male with the neoplastic process being located somewhat lateral to the right apex. At this time there is only minimal destruction of the second rib in the posterior axillary line.

ring elsewhere in the lung are not infrequently detected in the asymptomatic stage on a routine chest film, but in our experience this is exceedingly rare in the superior sulcus syndrome. The radiologic demonstration of adjacent rib or vertebral destruction makes the diagnosis almost absolute (Figures 2 & 3), but it should be pointed out that the classical clinical symptoms may develop before actual bone destruction takes place. ★★★

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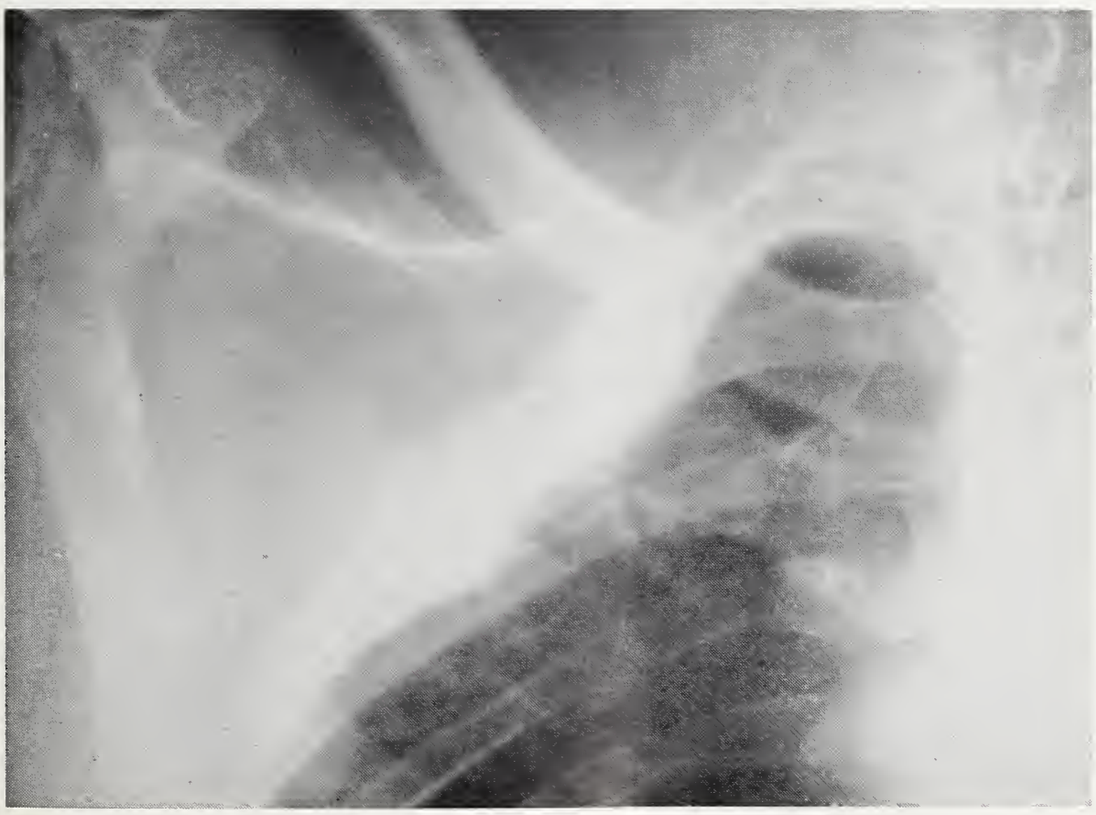


Figure 3. View of the right apical area on the same patient as shown in Figure 2, but after an interval of two months. Now there is gross destruction of the second rib. Biopsy revealed anaplastic carcinoma.

Alcoholism: The Doctor's Dilemma

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According to recent statistics, there are approximately 4,500,000 problem drinkers in the United States of whom over 800,000 are chronic alcoholics. The author points out that the treatment of alcoholism poses a number of unique problems. He discusses these problems and considers the psychiatric and medical management of the alcoholic.

THE DEFINITION of alcoholism is an extremely difficult task. Inasmuch as alcoholism is frequently an outgrowth of social drinking, it is sometimes difficult to find the point at which a person's label changes from "social drinker" to "alcoholic." However, for the purpose of this paper, alcoholism is defined as a disorder characterized by the uncontrolled drinking of alcoholic beverages which creates problems in living and which causes the patient's life to be centered about alcohol. According to the statistics that are available, there are approximately 4,500,000 problem drinkers in this country today of whom over 800,000 are chronic alcoholics. However, it is also estimated that 45,000,000 adults in the United States who are not problem drinkers drink alcoholic beverages in varying amounts.[2, 7] It should be clearly understood that these statistics are not true statistics but rather "educated guesses" based upon extrapolation of sample surveys, deaths due to cirrhosis of the liver, and other pertinent data.[7]

There are many problems involved in treating alcoholics as individuals, or alcoholism as a problem, which are unique to this disorder. First of all, the numbers of people involved make the problem almost insurmountable on the basis of the direct treatment of individual patients and make it mandatory that public agencies enter the field in one way or another. Secondly, this disorder involves the families, employers, and friends of the patient in a way that no other disease does. Thirdly, this disorder is extremely insidious in onset. Few, if any, alcoholics can give an accurate description of their "conversion" into alcoholics from social drinkers. Most of them will simply state that it was a gradual process and that they only realized that they were alcoholics when they tried to stop drinking and could not. Fourthly, the disorder, by the very nature of alcohol itself, destroys the motivation and judgment so necessary for successful psychotherapeutic treatment and dulls the anxiety which ordinarily brings a patient with an emotional disorder to the attention of a doctor.

The matter of why people drink at all is probably a social question rather than a medical one; however, it might be well to point out that the consumption of alcoholic beverages has been an accepted social custom for thousands of years and is deeply enmeshed with ordinary social life.[7] It might also be pointed out that attempts to regulate or abolish the consumption of alcohol by legislation or moral suasion have always failed in the past and will probably always fail in the future. Therefore the problem is a continuing one. The social benefits derived from the moderate consumption of alcohol are quite familiar, i.e., the lessening of social tension when in groups or at parties and the loosening of inhibitions. Unfortunately, the person who is destined to become an alcoholic gradually requires the consumption of increasing amounts of alcohol, both in amounts consumed at any one time and in times in which alcohol is consumed, until he crosses the line into alcoholism and loses the ability to choose how much he drinks. Gradually he loses the choice of drinking or not drinking and must drink to alleviate not only his original anxieties and personality conflicts but also the guilt and anxieties associated with the problems created by his drinking. Once he takes his first drink, he must proceed to drink until he is too ill to continue drinking. He then usually receives medical attention of some kind but probably resumes drinking when

able. Therefore, we can see that a vicious cycle is set up from which there is no escape other than complete abstinence or death.

Complete abstinence is an easy thing to prescribe, but an extremely difficult thing for the alcoholic to achieve. It requires a tremendous amount of support from all sorts of people, many of whom are no longer inclined to give support since the patient has disappointed them so many times in the past. It is also immediately apparent to a therapist that the alcoholic uses his disease to escape reality and is therefore even less prone to accept the facts of his disease than are other patients. He stubbornly refuses to admit that he cannot drink like other people until he reaches some point on the road to oblivion which is, for him, a bottom.[3] For some people this is the loss of job or family, in others it is the loss of everything; it may even require spending some time on skid row to bring this realization. Some alcoholics never admit that they have an uncontrollable disease.

CATEGORIES OF PROGNOSIS

Alcoholism may develop in anyone with a psychological problem which is relieved to some extent by alcohol; therefore, we would be faced with an impossible task were we to attempt the treatment of all alcoholics indiscriminately. Fortunately experience has enabled us to divide alcoholics into categories of differing prognosis so that we may concentrate our efforts on those people having the best chance for recovery.

Psychotics should be treated as psychotics. Personality disorders of the aggressive, hostile types receive little benefit from psychotherapy. They may be offered support, hospitalization, and guidance, but are not suitable candidates for psychotherapy. Mentally retarded alcoholics or alcoholics with brain damage should be institutionalized where possible. Patients with severe neurological or other illnesses will, of course, be hospitalized. The remainder of the alcoholics comprise the majority and consist of persons with mild personality defects or neuroses complicated by alcoholism. These can be approached at the proper time with psychotherapeutic and rehabilitative techniques. These patients seem to drink to alleviate the anxieties associated with their underlying psychiatric disease. The drinking is an attempt at self-treatment, using nature's oldest and most easily obtainable tranquilizer.

Had medical science recently discovered the tranquilizing effects of ethyl alcohol, I am sure that we would have prescribed it for a variety of anxiety-producing illnesses. However, experience would have demonstrated that the treatment often produced more severe and lasting problems than the original disorder, and it would therefore have soon disappeared from the list of desirable drugs. By the time the alcoholic discovers that his form of "treatment" is worse than the original disease, he is too far down the road to discontinue drinking on his own.

BEST PROSPECT

The type of alcoholic who is the best therapeutic prospect is a person who has been successful in life and who has gradually increased his alcoholic intake over a period of years. At some time in his history he has decided to quit drinking and discovered that he could not. At this point, he begins to consider some form of treatment. He changes friends, he switches to a milder alcoholic beverage, or even goes on the wagon temporarily; but his disease continues to progress until he reaches a "bottom." At this point he can be helped if he admits to himself that he is helpless to control his drinking and needs help. Alcoholics Anonymous may be his salvation provided that it offers what he needs in the way of understanding and support through the first difficult months of abstinence. Following this he may seek psychiatric treatment to facilitate his rehabilitation and to help him with his personality adjustments and in the resolution of underlying conflicts.

Because treatment of the alcoholic is a difficult, frustrating, time-consuming, and often hopeless task, we are constantly seeking quick and easy short cuts to successful treatment. Numerous attempts have been made in the past and are indeed being made today to belittle the psychological aspects of alcoholism, and to emphasize the physiological causes and effects. Alcoholism has been attributed to vitamin deficiencies, allergies, and numerous other causes. These attempts overlook the obvious fact that the drinking fills some deep psychological need in the alcoholic; therefore, I feel that the disease must be treated primarily by psychological means through psychotherapy by a trained psychotherapist. This is not to say that vitamins, paraldehyde, the conditioned reflex treatment, and all of these things have no place in the treatment, but rather that they are adjuncts to psychotherapy rather than treatments in themselves.

Obviously, the intoxicated alcoholic is not a candidate for anything until he has sobered up and "dried out," a process which takes about two weeks. During this period he should be given in-

travenous fluids containing injectable multi-vitamin preparations, "stress hormones," and any other drugs if indicated. At this time he should also be aware that psychotherapy is available if desired, as it is at this time that the alcoholic is most plagued with doubts, fears, and anxieties and is most apt to respond to a helpful, accepting attitude. I cannot overemphasize the harmful effect that a disapproving, condescending, or punitive attitude on the part of personnel will have on these patients. They have all been lectured to, fussed at, bawled out, cursed, and prayed over many times in the past to no avail. They are only too painfully aware of their serious predicament and of the effect their drinking is having, not only on themselves, but on others. In fact, this deep sense of guilt is often a large factor in forcing them to drink to alleviate the anxiety provoked by the guilt feelings. A feeling that someone understands them and is willing to help them in spite of their being "no good drunks" is often of great help in itself.

TREATMENT

The treatment used during the acute phase will vary greatly, of course, and depends upon the severity of the symptoms, the duration of the drinking episode, the presence or absence of delirium tremens, polyneuritis, or other complications, and the patient's general physical condition. In general, however, we would suggest the following regimen. To correct the fluid imbalance, 1,000 cc. of 10 per cent glucose in either saline or distilled water should be given twice or three times daily for several days. These intravenous infusions should contain soluble preparations of ascorbic acid, thiamine, nicotinic acid, and other vitamins which may be found combined in commercial preparations such as Solu-B. In addition, 5-10 units of regular insulin may be added to each infusion as this will stimulate appetite and alleviate some of the patient's anxiety. Adrenocortical extract, 20 cc., may be given with each infusion, as this "stress" hormone is a valuable stabilizing agent.

For the tremulousness and anxiety, patients should be given Librium, Sparine, or Thorazine in doses of from 25 to 100 mg. four times daily.[6] Diet should be liquid for 24 hours, then soft for several days to avoid aggravating the gastritis which these patients usually have. With this treatment the patient will rapidly improve in appearance and will begin to feel "human" again. At this time other treatments should be discussed with him to determine whether or not he desires to be helped. Without good motivation on the part of the patient, nothing can be accomplished beyond sobering him up. If the patient desires to continue in therapy, he should be given the opportunity to do so.

TWO IMPORTANT ADJUNCTS

Before discussing the psychotherapeutic aspects of the treatment, some discussion of the use of two important adjuncts is in order. That is, the use of the "conditioned reflex" treatment first advocated by Voegtlin and Temere and modified by Fritz Kant,[1] and the use of Antabuse therapy described by Hald & Jocobsen.[1] These treatments have as their aim overcoming the patient's "craving" for alcohol.

The first mentioned procedure, the "conditioned reflex treatment," produces in the patient a feeling of nausea at the sight, smell, or taste of alcoholic beverages by the conditioned reflex process. The patient is given a nausea-producing drug, usually emetine, followed by beer, whiskey, or wine, timed so that the nausea is produced at the time the beverage is being consumed. As described by Kant, the procedure is as follows: First, the patient is given some instruction about what is to happen and on the nature of conditioned reflexes. Then ¾ gr. of emetine is dissolved into two 10-ounce glasses of fresh cold water which the patient drinks. Following this, the patient is given 6-20 minims of a mixture of emetine, pilocarpine, and ephedrine. This mixture is made by dissolving into 40 cc. of sterile water, 3.25 gm. of emetine for emesis, 1.65 gm. of pilocarpine for disphoresis, and 1.5 gm. of ephedrine sulfate for general support. A total of eight treatments is necessary. During the first few, the patient is not allowed to drink the alcoholic beverage, but only swishes it around in his mouth. He also looks at the bottle and smells it. After the conditioned reflex is well established, then the patient is allowed to drink the alcohol. At the completion of the series, the patient will be unable to tolerate the sight, smell, or taste of the beverages used in the procedure. This will aid him to lose his craving for alcohol, as frequently the mere thought of drinking alcohol will produce violent nausea.

The use of Antabuse has a definite place in the treatment of the alcoholic. It is not a "treatment" in itself and indeed has no effect whatsoever on the patient, as long as he does not drink alcohol. A patient who is taking Antabuse and who then drinks alcohol will develop severe symptoms within 30 minutes. The severity of the symptoms produced varies directly with the amount of Antabuse being taken and the amount of alcohol taken. These symptoms include flushing of the face and

eyes with headache, "constriction" pain in the chest, palpitation, weakness, nausea, and sometimes prostration and collapse. This experience is quite frightening to the patient and prevents him from taking the first impulsive drink which is the downfall of the alcoholic.

It takes from three to five days to eliminate Antabuse from the patient's system, and before the expiration of this much time, most alcoholics will have resisted the impulse and will continue to remain "dry." Antabuse produces its symptoms by interfering with the metabolism of alcohol at the acetaldehyde stage and is therefore potentially very dangerous. Patients should be made aware of the danger and should probably have a "test" dose of alcohol (1½ ounces) before they are released from the hospital. During the reaction following the test dose, oxygen and other restorative measures should be available and ascorbic acid, 1.0 gm. should be given intravenously if the symptoms become alarming. Ascorbic acid lessens the danger from the test in some still unknown manner.

PSYCHOTHERAPY

The use of adjunct procedures is most helpful in controlling the alcoholic's desire to drink, but the basic treatment remains psychotherapy—psychotherapy which is directed first at the symptom "alcoholism" and only later at the underlying causes. It is necessary to relieve the symptom first because it has by this time completely overshadowed the underlying neurosis. It is compared by H. Thiebout[4] to the internist who must first treat a fever of 106, no matter how reluctantly or "unscientifically," before he treats the underlying infection, or he will run the risk of losing his patient to the symptom before the disease can be brought under control. Another example is the case of a cancer which has been produced by an irritant. Can we say removing the irritant will cure the cancer? Of course not, the cancer must be treated.

Many authors have noted that the greatest resistance in therapy is that the alcoholic's goal in therapy is to be able to resume drinking "like other people"; he is unwilling at first to accept the fact that we cannot "cure" an alcoholic in this manner.[3] He will be forever unable to drink socially, and this is indeed a difficult idea to convey to the patient. It is only after the patient surrenders to this idea that hope for eventual cure may be felt. Having once accepted the idea he will never be able to drink again, he will be willing to continue therapy in order to learn acceptable new methods of mature social behavior.

When we refer to the alcoholic in general as "immature" or as "acting like a spoiled brat" we are probably much nearer the truth than we usually realize, for indeed their behavior is quite analogous to infantile patterns. Although all alcoholics are different, the following dynamic formulation best fits most of them.[3] The infant exhibits three patterns which are found in these individuals. First the fantasy of omnipotence; that is, the infant is the master of all he surveys. He has only to cry and he is fed, watered, changed, and petted. Second is the poor toleration for frustration that the infant has and his readiness to let the world know about it. This stems directly, of course, from the monarch within. The third is the child's tendency to do everything in a hurry. They do not walk, they run. They cannot engage in play situations which require long periods of concentration or endeavor, and they flit about like butterflies from toy to toy.

Thus we can see that at the beginning of life the psyche (1) assumes its own omnipotence, (2) cannot accept frustrations, (3) functions at a tempo much faster than at adulthood. Now if we apply these ideas to the immature adult we begin to see how the alcoholic feels and are able to explain some of his behavior.[3]

Omnipotence is of course associated with royalty. We can see how an individual, clinging to omnipotent ideas, will feel that it is impossible to function on an ordinary level. Obsessed with the idea of royal or divine status, he will be most distressed to function in the lowly and humble areas of life. As one of my patients expressed it, "I have too much human for my skin." This inability to be content with his own performance and station in life will lead to a continuous state of frustration, which we know he tolerates poorly, if at all, and he will begin to attribute his inability to function to all sorts of outside factors. The sense of frustration and his inability to tolerate it, together with his omnipotent feelings and his impatience leads to "job hopping" in which the person constantly seeks a quick and easy way to the top. He is restless and has an inner tension, and this leads to alcohol in an attempt to overcome his lack of comfort. He celebrates wildly or drowns his sorrows with equal determination. Attempt to prevent his drinking, and he reacts as a monarch, or as a child reacts, and drinks even more. This explains how well-meaning relatives and friends often aggravate the drinking by attempting to coerce the drinker into sobriety. Some middle course must be adopted by the family between absolute permissiveness and coercion, disapproval, and punishment. The alcoholics are neither no-good drunken bums nor blameless victims of so-

ciety, and treatment should be directed along the lines of helping the alcoholic and his family understand his problem and in making some readjustment to his problems without alcohol.

TREATMENT OF CHOICE

Because of the great need in these patients for acceptance and understanding and their difficulty in talking (when sober), I feel that group psychotherapy with other alcoholics to be the treatment method of choice for most of them. I believe that some liaison with Alcoholics Anonymous is advisable and helpful, and talks to the group by A.A. members should be welcomed. Role playing is useful in helping the alcoholic in handling specific social problems. These will include, for example, learning how to say "no" gracefully when offered a drink, without being ashamed or sanctimonious.

The problem of alcoholism is a widespread and little understood problem and one which has tremendous social implications. Before any marked improvement in the total picture can be made, these things must be done:

1. Help must be made available to these patients, and the public must be made aware that help is available.

2. Dissemination of information to the public, both practitioners and laity, must continue in order to change the general attitude that alcoholism is a sin, into a more acceptable attitude that alcoholism is the symptom of an emotional disease and that the alcoholic needs sustained help and prolonged treatment. This can only take place through the combined efforts of agencies such as A.A., churches, medical associations, welfare agencies, and any others directly concerned with the problem. Perhaps the most encouraging sign to me at the present time is the increasing interest in the problem displayed by industry. People are beginning to realize the enormous cost to the economy in lost man hours, spoilage, and accidents brought about by alcoholism.

3. Continued effort toward research into the causes, extent, and treatment of alcoholism must be made.

4. We must place the information which we have at the present time into the hands of the people concerned with the treatment of the alcoholic.

There is an increasing interest on the part of psychiatrists and allied disciplines in this problem, and more and better research will undoubtedly be done in the future. It is not a hopeless problem, although admittedly a complex, difficult, and frustrating one, and I believe the problem will be "solved" in the future just as many other problems have been "solved" in the past. ★★★

802 Medical Towers

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THE ESSENTIAL INGREDIENT

"I try so hard to be a good mother," the patient anxiously told the psychiatrist. "I get up early in the morning, fix the formula, wash clothing and diapers, and get the stroller out in the park when the weather permits."

"That's not merely commendable, Mrs. Jones, but it's also quite normal," the doctor observed. "Just what is your problem?"

"I have no baby."

SPECIAL ARTICLE

Problems in the Prevention Of Automobile Accidents

HOWARD N. SCHULZ
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The 38,000 fatalities and 4.7 million injuries in automobile accidents constitute one of the nation's largest unsolved health hazards. Human failure is chiefly responsible for accidents. Scientific research, however, has not produced evidence that groups with specific diseases have higher accident rates than comparable groups.

Applying the principles of epidemiology offers an opportunity for greater insight into the problems of accident causation and accident prevention. Suggestions for physician participation in accident prevention programs are offered.

ADVANCES IN MEDICINE have led to a reduction in the incidence of many diseases. At the same time the vast increase in the number of automobiles, the number of drivers, and the number of miles driven has led to a situation where accidental injury is now a greater threat than illness in many parts of the population.[1] Accidents are the leading cause of death between the ages of 1 and 36 and motor vehicle accidents outrank all other causes of accidental death in all age groups except less than 1 and over age 75.

In the United States there are about 38,000 traffic deaths annually[2] and approximately 4.7 million persons injured.[3] On the basis of these data it has been predicted that one person in every ten in this country will be injured or killed in a motor vehicle accident within the next four years. This constitutes one of the nation's largest unsolved health hazards.

Of particular significance is the fact that these accidental injuries and deaths occur most frequently to young people. In 1957 over one-half of the 38,000 people killed in motor vehicle accidents were under age 25.[4] When a comparison is made of the years of life lost from automobile accidents and diseases such as cancer and cardiovascular disease, which occur principally in older age groups, the deaths from automobile accidents assume an even greater significance. By using the life expectancy tables, and from the age at death of persons killed in motor vehicle accidents, it has been estimated that approximately one and one-half million life-years were lost in 1959.

It is of interest to note that the death rate per miles driven has shown a steady improvement over the past few years, but the number of annual deaths in automobile accidents has remained fairly constant.

For those who feel that the efforts in this country have not been effective, a comparison of the experience with other countries is in order. There are approximately 100,000,000 four-wheeled vehicles in the world today,[1] and about the same number of two-wheeled vehicles. The United States has about 75,000,000 of these.

It is estimated by the World Health Organization[1] that about 1,000 people a day die on the streets, highways, and roads of the world. In the United States this number is about 100 a day. This country with between one-third and one-half

Secretary, Committee on Medical Aspects of Automotive Safety, American Medical Association.

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of the world's motor vehicles has only about one-tenth of the fatalities.

Continuing and expanded efforts are needed, however, just to keep the rate at its present level. The effect of the rapidly increasing birth rate immediately following World War II has already been evidenced in the elementary school systems. Sixteen, the age at which most states grant the drivers license, added to 1946, the year after the war ended, brings us to 1962. The number of drivers, the number of automobiles and the number of miles driven will increase sharply in the next few years and will continue to increase.

HUMAN FAILURE

Almost all investigators agree that most motor vehicle accidents can be attributed to human failure. While this broad generalization is undoubtedly true, attempts to relate accident frequency to a wide number of physiologic human variables have generally resulted in low correlations. For example, the group with the lowest number of physical impairments, i.e., the group under age 25, has the highest accident frequency. Studies of deaf drivers have not revealed higher accident rates than comparable groups of unimpaired drivers. It is, therefore, more accurate to say that motor vehicle accidents may be attributed to human failure interrelated with the vehicle and the environment.

Physicians, because of their training, will immediately see the comparison to the field of epidemiology. Epidemiology is concerned with the identification of the various factors which influence interactions between the host, the agent, and the environment. In the case of the motor vehicle accident problem, the driver is the host, the vehicle is the agent, operating in a complex of freeways, roads, streets and highways, which make up the physical environment and subject to the influences of the social environment.

THREE PRINCIPLES

The methods of control of disease employing the principles of epidemiology involve (a) reduction of the susceptibility of the host, (b) reduction of the hazard associated with the agent, (c) changing the environment. The same methods have been employed in the attack on the motor vehicle accident problem.

The development of divided, limited access highways, has led to a marked reduction in accident frequency in terms of accidents per miles driven. It is obvious that reducing the exposure will reduce the number of accidents.

SAFETY FEATURES

Many features in the vehicle have contributed to improved safety. Among these are improved lighting and signalling systems, braking and steering systems, blow-out proof tires, safety door locks, adjustable seating, and the increased acceptance of restraining devices. The seat belt campaign which originated with the American Medical Association, the National Safety Council, and the U. S. Public Health Service has led to the installation of seat belts in millions of cars. The evidence is incontrovertible that the use of seat belts will materially reduce the number of fatalities and the severity of injury in motor vehicle accidents.

Legislation in Wisconsin, New York, and Virginia, making the installation of seat belts mandatory in the front seats of new vehicles, has led to a statement from a spokesman of the automobile industry, predicting that front seat belts would be standard equipment in all passenger vehicles in the 1964 model year.*

A CONTRAST OF EFFORTS

Contrasting the efforts to produce safer vehicles is the recent emphasis on speed and power. Current automobile advertising in one of the popular magazines includes statements such as the following:

"torrid new luxury sports car"
"hottest of the new-size cars"
"super-powered"
"sizzlers"
"live it up with a lively one"

It would seem that the gentlemen's agreement of only a few years ago to deemphasize the horsepower race is being abandoned.

One of the five major automobile companies, hoping to improve its financial position, has announced that a stock sports model will be introduced soon. This model without conversion or beefing up will have a top speed of 170 miles per hour. Demonstration of the ability to handle safely a vehicle at speeds anywhere close to the top

* The Mississippi Legislature enacted S. B. 2059 on May 26, 1962, requiring safety belts on the front seats of all 1963 and subsequent models of automobiles sold in the state.

speed undoubtedly will not be a prerequisite for the purchase of the vehicle.

THE ACCIDENT-PRONE

The physician can make his most significant contributions in the reduction of the susceptibility of the host. Research in identification of the individual who has a high likelihood of accidents is badly needed. It is possible with the methods currently available to separate 1,000 persons into two groups and on the basis of administered tests predict without fail which group will have the more motor vehicle accidents. The tests and means of measurement, however, are not sufficiently precise to apply to specific individuals with a high degree of accuracy.

Attitudes and basic personality traits are acknowledged to be important factors in accidents. The measurement of these factors is unreliable.

The physician can identify certain of his patients who should not be driving at all or at best should be driving under restriction. The epileptic patient who is not well controlled, the patient with a history of multiple occurrence of faintness and syncope, and the individual with uncontrolled diabetes are examples of those who should not be driving. Identification of those obviously unfit to drive is not too difficult. The real problem exists in attempting to identify those who are borderline and whose continued driving represents a hazard to themselves, their families, and to the public.

Identification of those unfit to drive is one problem. The withholding of the driver's license is another. The granting of the privilege to drive is an administrative function of the State. In most states, there is limited liaison between the motor vehicle administrator and the organization representing the physicians of the state. The administrator must base some of his decisions on medical judgment, and he should have available for advice and guidance the physicians to render that judgment. Some state medical societies have formed medical advisory committees to the motor vehicle administrators to deal with the controversial medical cases.

There are many examples of accidents due to medical conditions, but it must be recognized that no scientifically controlled study has demonstrated that drivers with any particular disease, including diabetes, epilepsy, color blindness, cardiovascular disease, or deafness, have a higher accident rate than comparable groups not having the condition.

This points to one of the areas where physicians can be of help. The medical investigation of a large number of accident fatalities and survivors of accidents is needed in order to learn the true cause of accidents.

In many states the investigation of an accident is conducted entirely by state police or sheriff's police. In any event, the investigator has responsibilities which have precedence over determining the cause of accidents. First in importance is the rendering of first aid to survivors, second is to expedite the resumption of normal traffic flow, third is to assess the accident in determining who is responsible, and after these are accomplished, the investigator can devote his attention to determining the cause.

How can we attack the problem unless the cause is known?

THE PHYSICIAN'S ROLE

What can physicians do individually? The following suggestions are offered as areas which need attention and support. Some of them are not related to medicine but come under the category of responsible citizenship. The physician can contribute by seeing to it that:

1. Members of his immediate family have adequate driver training.
2. The community has the facilities to train drivers.
3. Enforcement of existing laws is impartial and effective.
4. The need for additional legislation is continuously reviewed.
5. Investigations of accidents are expanded to produce meaningful results in terms of understanding causation.
6. Local facilities for emergency medical care are the best possible.
7. First aid training for ambulance and rescue squads is available.
8. Transportation of the injured is adequate.
9. Care is exercised in advising patients about their ability to drive.
10. Patients are cautioned about the effect of prescribed medication on the ability to drive.
11. Available safety devices are used by himself and his family and recommended to his patients.
12. Counsel and guidance is available to the motor vehicle administrator.

While this list is far from complete, the serious consideration and implementation of these items would materially reduce the frequency of motor vehicle accidents.

It is interesting to speculate on the types of transportation which will be available in the next 50-100 years. Certain urban areas are already faced with serious problems in providing freeways, streets, and parking areas for vehicles of the residents, commuters, and visitors. It is likely that our population will become increasingly mobile and

this suggests that individual transportation units not confined to the earth's surface will be essential. The prototype has already been built. The vehicle without wheels riding on a cushion of air is a reality. Many more advanced concepts will unquestionably be applied. Is it too fanciful to predict a transportation system in which the individual programs his destination before he leaves his home or place of business and then is not called upon to make any further decision? The frequency of accidents is directly related to the number of decisions the driver must make. Take away the necessity for decision making and the number of accidents is reduced and perhaps almost entirely eliminated. While this may be in the future, the immediate problems of the present require the attention and the help of all physicians in order to meet the challenge of this major hazard to health. ★★★

535 North Dearborn St.

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2. Accident Facts, Chicago, National Safety Council, 1961.
3. Accident Injury Statistics, United States Public Health Service, Division of Accident Prevention, 1960.
4. McFarland, R. A., and Moore, R. C.: Values and Ideals of American Youth, Columbia University Press, 1961.

5-SECOND HUG *VS.* 50-MILE HIKE

A Chicago physical education professor has come up with a pleasant substitute for the 50-mile hike. Dr. David Misner, head of the physical education department of George Williams College, proposes a vigorous 5-second hug for the wife each morning for flabby executives. Besides the hug, which is designed to tone up chest muscles, Dr. Misner outlines a new list of exercises specifically planned for the deskbound adult. All but one can be performed without getting up from the chair. The regimen: (1) Lock hands behind neck, press back with the head—to exercise the upper back. (2) Cross hands over abdomen, place elbows on chair arms and "try to push the chair through the floor"—good for the abdomen. (3) Make fists, put one on top of the other, press down hard—gives same effect as push-ups. (4) Fold arms over abdomen, press out hard with elbows against sides of chair—but pick a sturdy executive chair.

—*The Insider's Newsletter*

Clinicopathological Conference XL

Conducted by the Department of Pathology
University of Mississippi School of Medicine
Jackson, Mississippi

In CPC XL Dr. J. R. Snavely discusses the case of a 77-year-old white male who had been admitted to the University Hospital three times in ten months for pleuritic pain, thrombophlebitis, hemoptysis, and cardiac insufficiency. Anticoagulants were begun at the time of his first admission because of thrombophlebitis but discontinued on his third admission because they were no longer felt necessary. Other therapy consisted of antibiotics, expectorants, and digitalis. On his fourth admission, two weeks after his discharge from the previous admission, he complained of epigastric and substernal pain, soreness of the mouth, dysphagia, increasing right pleuritic pain, and hemoptysis.

Other discussers are Drs. Robert D. Sloan, William D. Love, and Thomas M. Blake. Dr. Joel G. Brunson presents the autopsy report.

THIS WAS THE FOURTH University Hospital admission for this 77-year-old white male. He had been seen here three times in the ten months prior to admission because of pleuritic pain, thrombophlebitis, hemoptysis, and cardiac insufficiency. In addition, on his third admission he had had fever and chills. Anticoagulants were begun at the time of his first admission because of thrombophlebitis but discontinued on his third admission (in November 1961) because they were no longer felt necessary. Other therapy consisted of antibiotics, expectorants, and digitalis.

His fourth and final admission was on Dec. 5, 1961, two weeks after discharge from the previous admission. After leaving the hospital he had developed epigastric and substernal pain, soreness of the mouth, and dysphagia to the point that eating was difficult because of the pain. He also had noted increasing right pleuritic pain and hemoptysis.

He was confused and slightly dehydrated. Blood pressure was 160/100, pulse 72, respiration 18, and temperature 98°. His oral and pharyngeal mucosa was reddened and covered with a grey-white exudate. Breath sounds were decreased, and there were moist rales and dullness in the right base posteriorly. There was a grade II/VI precordial systolic murmur, and the cardiac rhythm was regular. A pulsatile mid-abdominal mass (not described further) was noted, and the liver edge was palpable three finger breadths below the right costal margin, moderately hard and tender.

Laboratory data showed a white blood count which varied between 9,600 and 12,400 with normal differential. Hematocrit ranged from 36 to 41. Routine urinalysis initially showed 2+ albumin, 20-30 red blood cells and 10-15 white blood cells, but a repeat urinalysis showed only 1-3 red blood cells and 5-10 white blood cells. Electrolytes on admission were: chloride, 97 mEq/L; CO_2, 31 mEq/L; potassium, 5.2 mEq/L. On the day of his death the potassium was 6.6 mEq/L. BUN initially was 40 mg. per cent and on the day of death it was 37 mg. per cent. Serum osmolarities ranged from 295 to a final one of 311. Other laboratory studies revealed bilirubin 1.3 mg. per cent with 0.5 direct, TSP of 4.9 gm. per cent with a globulin of 2.5, BSP of 27 per cent, 3+ cephalin flocculation, and a urinary 17 ketosteroid of 3.5 mg. per cent. Urine cultures grew out gram negative rods and throat culture grew out *Candida albicans;* sputum culture showed only alpha hemolytic *Streptococci* and *Neisseria.* Intermediate PPD gave a 1 cm. area of induration. EKG showed left bundle branch block. Chest films showed an enlarged heart, pleuritic reaction in the right and

left chest, and coarse infiltrative changes in the left lower lung fields.

The patient initially was put on digitalis, penicillin, streptomycin, and nystatin. By Dec. 8 (three days after admission) his pharyngeal exudate had cleared, and he was taking oral nourishment fairly well, though some IV solutions were required. On Dec. 11 he was started on an exchange resin because of his increasing serum potassium, and Chloramphenicol was added. On Dec. 12 he began coughing up gelatinous, bloody sputum and his urinary output had decreased to only 400 cc. per 24 hours. Moist basilar rales persisted, but he remained afebrile. On Dec. 13 he suddenly became comatose after having been alert and apparently well a short time before. He was pronounced dead shortly thereafter.

REVIEW OF PROTOCOL

Dr. J. R. Snavely: "The protocol, as I imagine you have already noted, offers us several diagnoses for the three previous admissions of this 77-year-old white male, but we are not offered supporting data. This method of presenting clinical material is not generally regarded as acceptable for this type of exercise, but I have no choice but to proceed, assuming that the diagnoses are based on acceptable criteria.

"On the third admission, which was the one preceding this final admission, there was an episode of fever and chills, and the way this is phrased, it is implied that fever and chills were not part of the antecedent history. Anticoagulant was given on the first admission because of the thrombophlebitis and was discontinued on the third admission because it was "no longer felt necessary." Dr. Love is going to make a comment or two about this. On the other hand, it seems possible that the treatment was of benefit and that withdrawal was associated with considerable deterioration. Other therapy consisted of antibiotics, expectorants, and digitalis. It is perfectly obvious that we are supposed to assume that this man had peripheral vein disease, that he had chronic congestive heart failure, and that he was dropping off little bits of thrombus into his venous circulation and was having recurrent pulmonary embolism. I don't see any reason to doubt this except it is a little too straight forward.

"His final admission on Dec. 5, 1961, two weeks after discharge from his previous admission, was characterized by a history which included epigastric and substernal pain (and this was the first we have been told about substernal pain), soreness of the mouth, and dysphagia to the point that eating was difficult because of the pain. I am going to assume that this was oral dysphagia and was related to the lesion seen in the mouth. In addition to the substernal pain, there was also right thoracic pain which was related to respiration—that's what one means when he says pleuritic with hemoptysis. So this again is reason to believe that we are dealing with cardiac insufficiency and with pulmonary embolism arising in the peripheral venous system. In addition to this, we have the difficulty with the mouth which we will speculate about further.

"He was confused and dry. His blood pressure was modestly elevated in both systolic and diastolic levels. His pulse was 72 and, I presume, regular, and the oral and pharyngeal mucosa was covered with a grey-white exudate. Now, as you know, there is a rather involved differential diagnosis for this, but I think we are offered the probability that this was a mycotic infection further along. I would like to remind you, though, that particularly in the debilitated, even in the absence of an epidemic, diphtheria always has to be considered in this type of situation, as do all the other causes of ulcerative stomatitis.

"Breath sounds were decreased, and there were rales and dullness at the right base. There was a not particularly loud systolic murmur. The statement that it was "precordial" doesn't help me much. I would like to know more definitely where it was. In the absence of a better mechanism for it, I suppose I can assume that this represents some dilatation of the left ventricular cavity with functional mitral insufficiency. This pulsating mass in the abdomen, which is not further described, could have been an aneurysm, of course, or could have just been a palpable aorta. I'll not belabor this point because we are not given any information that we can use as far as distinguishing the nature of this mass from an aneurysm. The liver was enlarged and was slightly tender.

LABORATORY FINDINGS

"In the laboratory findings there was a modest leukocytosis with a normal differential. If this means anything, it means that what ever inflammatory process was going on was stabilized. He was slightly anemic. There was albuminuria initially with a lot of red cells and white cells, but a repeat urinalysis showed no more cells than we commonly see. Potassium was normal and it is interesting to observe that later it went up some. I don't have a very satisfactory explanation for

this. The other electrolytes were within normal limits.

"There was slight elevation of the blood urea nitrogen but no more than we see in many sick patients on the ward, and the serum osmolarity was not seriously disturbed. There was a tiny elevation of the serum bilirubin. I think it is of interest that almost half of this was of the one minute direct variety. There was a slight decrease in the serum albumin without an increase in globulin. There was marked BSP retention and a 3+ cephalin flocculation. For some reason or other somebody measured the urinary 17 ketosteroids and found a low value, but not low for a 77-year-old man who was sick.

"The throat culture grew out *Candida albicans* and the doctors assumed that this was a thrush exudate in the mouth. The PPD was positive at intermediate strength, and the EKG showed left bundle branch block. The heart was enlarged. There was a pleuritic reaction and infiltrative changes in the left lower lung field. There is no help here, beyond what we were able to guess from the original description.

HOSPITAL COURSE

"The patient was given digitalis and treated for infection. His pharyngeal exudate cleared on this treatment, and he was taking oral nutriments fairly satisfactorily. Because of the elevated potassium, he was started on oral exchange resin, and for some reason (I guess they thought there was more infection than comes through in the protocol) Chloramphenicol was added. By now he had begun to cough up gelatinous bloody sputum. Gelatinous is an interesting word; it does carry the connotation of Friedlander's bacillus pneumonia, but on the other hand the bloody sputum with pulmonary infarction is often fairly gelatinous also. I think the possibility that there is a lung infection in addition to his infarction and failure is very real, and I don't find his failure to respond with a brisk leukocytosis particularly helpful.

"His urinary volume decreased, rales persisted, fever did not appear, and I gather he died in a rather undramatic fashion. We are not given a reading of the blood pressure to determine whether a fall in blood pressure was an important part of the renal failure. If he has what I think he has, namely recurrent pulmonary embolism, I think that a drop in blood pressure would be expected. I will say a word or two more about the liver possibilities. I think all the data are compatible with a chronically congested liver. They are also compatible with a liver that is the seat of cirrhosis or one which is the seat of metastatic disease. In this patient I will merely say that the data are explained adequately by congestion. Dr. Sloan, could we see the films now? I would like Dr. Love to comment on whatever he sees fit."

CHEST FILMS

Dr. Robert D. Sloan: "During the 10-month period that the patient was followed, multiple chest films were taken. The first of these was on Feb. 10 when I gather he came in with the original acute episode. At that time the heart was considerably enlarged with the apparent prominence to the left ventricular segment, and moderate tortuosity and dilatation of the aorta with calcium in the arch was noted. There was a relative absence of parenchymal vascular markings at the left base; the lungs otherwise were clear.

"A film three days later revealed that this radiolucent pattern had been replaced by an increase in parenchymal density, and a film on Feb. 24 revealed a fairly brisk pleural reaction at the left base. The overall pattern would fit quite well with a good-sized pulmonary infarct. A film seven months later revealed continuing left ventricular prominence, although the overall size of the heart appeared somewhat smaller. The lesion at the left base had been replaced by an area of minimal parenchymal scarring and some pleural thickening. In November 1961, at the next to last admission, a film revealed gross parenchymal pathology at the right base, and these changes did not clear up to the time of death.

"Several films of the abdomen, not mentioned in the protocol, were taken during his various visits. These revealed the areas of radiologic interest. One of these is a fuseform aneurysmal dilatation of the lower abdominal aorta and the right iliac artery, outlined by calcium. The second point of interest is a calcific density in the right lower quadrant, which appeared to move about on different films. I hope Dr. Brunson found this at autopsy and can tell us its nature. I don't believe that it represents a gallstone or that it is related to the urinary tract. More likely it is a fecalith, either in the appendiceal lumen or in an area such as a Meckel's diverticulum. It is presumed that this is an incidental finding in the case, along with the aneurysm of the lower aorta and iliac artery. The main x-ray changes are the enlarged heart, the enlargement being predominantly left ventricular in nature, and bilateral changes in both lungs, the pattern of which could fit quite well with pulmonary infarction."

Dr. Snavely: "Dr. Love, would you give us the benefit of your views?"

Dr. William D. Love: "I think this is a good example of the value of a complete x-ray report. The amount of information added to that originally given makes this an entirely different type of protocol. I think it rules out a number of things which we were considering. One is that the recurrent pulmonary emboli might actually be the cause of the heart disease, rather than an accompaniment. We are told that the patient had cardiac insufficiency. This is certainly not synonymous with congestive heart failure, but apparently congestive heart failure was what was meant. In any case, congestive heart failure associated with thrombophlebitis is quite commonly associated further with pulmonary embolism.

"One of the indications for anticoagulants about which there is little argument is the prevention of pulmonary embolism in patients who have a tendency to thrombosis and venous engorgement. The demonstration of left ventricular hypertrophy on the chest film indicates that the pulmonary emboli were not the primary cause of the heart disease, since this would have resulted in right ventricular hypertrophy. I believe it is worthwhile to remember that patients apparently go through a period of hypercoagulability when anticoagulants are stopped. Patients with coronary artery disease are quite prone to have recurrences of myocardial infarction if these drugs are stopped suddenly. If the decision is made to stop the therapy in patients of this type, it should be done gradually over a matter of several weeks. We are not told actually whether or not this was done in this patient.

"The left bundle branch block presumably was related to arteriosclerotic heart disease with coronary artery narrowing or occlusion. If the interventricular septum were examined extremely carefully, the chances are that an anatomic lesion could be demonstrated in the region of the bundle. In view of the findings in the chest, it would seem likely that the mass in the abdomen was probably an aneurysm as Dr. Sloan has pointed out. I can see nothing in the protocol to prepare me for any surprises."

Dr. Snavely: "Dr. Blake, would you care to add anything?"

Dr. Thomas M. Blake: "I think that I would have nothing to add except to agree with what both you and Dr. Love have said and to say that the use of prothrombopenic anticoagulants in the measurement of venous thrombi seemed to be on pretty solid ground and the protocol doesn't say why they were discontinued.

DISCUSSER'S DIAGNOSIS

Dr. Snavely: "Now our diagnosis is congestive heart failure on the basis of some kind of heart disease associated with left ventricular enlargement, and I suppose with this modest hypertension recorded that hypertensive heart disease would fill the bill quite satisfactorily. The diagnosis also includes peripheral vein disease with pulmonary embolism and pulmonary infarction, possibly with the addition of some pneumonia. I don't believe it is necessary to diagnose anything more than this to explain the data available. I suppose I might mention that the fact that patients with cancer are more prone than the population at large to have peripheral venous disease, and one could put together wasting, liver enlargement, abnormal liver function tests, and peripheral venous thrombosis to make a diagnosis of hidden cancer, but I don't believe it is necessary to do this to explain the data. Anybody else want to make a diagnosis?"

AUTOPSY REPORT

Dr. Joel G. Brunson: "As Dr. Sloan indicated, that was a fecalith in a Meckel's diverticulum which had been apparently sealed off, and we could not demonstrate a luminal connection between it and the bowel. The lower portion of the aorta, near its bifurcation, showed marked dilatation and distention. Cut section showed thrombosis with marked narrowing of the lumen. There was some question actually about how much blood could get through the vessel at this site. Also, a severe degree of atherosclerosis was present.

"The heart was enlarged to about one and a half times normal size. Of some interest is the fact that the root of the aorta did not show a very pronounced degree of atherosclerosis. There were no valvular lesions, but the coronary arteries showed marked rigidity due to sclerosis, with luminal attenuation. There was some fibrosis and ischemic change in the papillary muscles of the left ventricle. On sectioning the left ventricle, marked fibrous streaking was evident; there were manifestations of ischemic changes in the myocardium. There were areas also in which the myocardium appeared quite soft and was yellow (Figure 1). There was some evident congestion, but not much in the way of hemorrhage in asso-

ciation with these areas. In addition, other areas showed fairly distinct areas of fibrosis and scarring with residual muscle bundles. In other areas there were reasonably recent ischemic changes of infarction, largely limited to that portion of the left ventricular wall bordering on the interventricular septum. The recent infarct was due to a recent thrombus in the left descending branch of the coronary artery. In addition, there was almost total occlusion of other branches of the coronary arteries by atherosclerosis. Not only in the major coronary arteries but in the intramural branches as well, there was fairly dense thickening. In other portions of the coronary arteries there were old thrombotic lesions with organization and recanalization. Similarly, mural thrombi were present both in the left atrium and in the left ventricular cavity.



Figure 1

"The liver was not enlarged, and it weighed about 1,500 gm. It showed a classic nutmeg pattern or long-standing passive congestion (Figure 2). Microscopically, there was atrophy of the liver cords, most marked about the central veins. Some preservation of cords was observed towards the periphery, but there was accumulation of fat in these cells, an indication of hypoxia. There was also a moderate degree of cholangitis.

"We believe that his heart lesion, that is, a recent infarction superimposed on an old one, may have been sufficient to have killed him, but looking at the lungs one can only wonder whether or not he may have had an additional factor. The left pleural cavity was almost completely obliterated by fibrous adhesions, and the left lung showed old infarcts predominantly in the lower lobe. On the right side there were about 1,200 ml. of fluid and, in addition, recent infarcts in the right lower lobe and in the upper lobe. Extending down into almost all branches of the pulmonary arteries, there were numerous emboli. The pulmonary vessels were quite prominent all the way out to the periphery of the lungs (Figure 3). Microscopically, emboli of varied ages were observed, and in some sections there was evident pulmonary atherosclerosis. In some of the vessels there was organization-recanalization of thrombi or emboli, with reconstitution of the smooth muscle layer in the recanalized portion of the thrombus. In going on somewhat further one could find



Figure 2

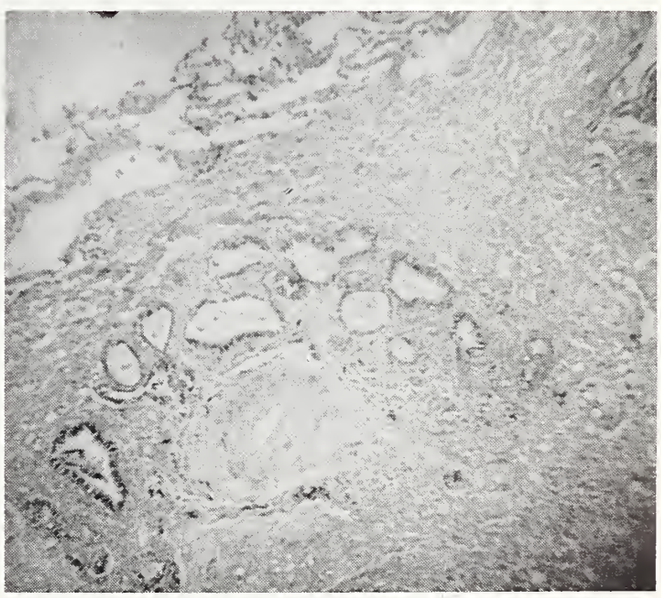


Figure 3

many vessels in which there was marked luminal attenuation and thickening of the intima. So this patient apparently did have recurrent episodes of pulmonary emboli with what we think led to the development of pulmonary atherosclerosis. Let's say in quotes 'organized pulmonary emboli with probable pulmonary hypertension' as an added attraction to coronary arteriosclerosis and recent myocardial infarction. He also had a fairly large area of encephalomalacia in the right cerebral hemisphere, as well as fairly marked hypertrophy of the median lobe of the prostate gland, but the renal lesion, if it is important, consisted largely of nephrosclerosis."

SUMMARY

Dr. Snavely: "Looking back over this, we should have paid more attention to the myocardium for a number of reasons. It is well known that in patients with left bundle branch block it is virtually impossible to recognize the changes of infarction with a standard EKG. I think clinically the emphasis, Dr. Brunson, would be more towards pulmonary infarction with the myocardial infarction sort of wrapping things up rather than the other way." ★★★

2500 North State St.

NEW USE FOR 'BRAINS'

Dade County, Fla., long an innovator in local government, has now come up with a promising new use for electronic brains. It has set up a complex computer program to show in advance where and how car crashes will occur, enabling police to stop highway mayhem before it begins.

Director of the program, Inspector Glenn Koenig, takes accident records for three years back and feeds the data into an IBM computer. Besides revealing the types of accidents likely to occur, the "brain" also spells out (1) intersections likely to have mishaps as a result of violations; (2) what dates they will occur; (3) what time of day motorists are most careless. Police can then be pulled off other beats, sent to cover the potential trouble spot.

The brain has already prevented an impressive number of fatalities. On Miami's Motel Row, 12 policemen were recently detailed to watch out for violators at an hour and date spelled out by the computer. As a result, the average five accidents which normally would have occurred were avoided. Inspector Koenig told *The Insider's Newsletter:* "We know that for every 100 violations, there will be one accident. Now we also know that the mere presence of an oversized police coverage is enough to discourage reckless motorists. So we have fewer accidents and hand out fewer tickets."

—*The Insider's Newsletter*

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Meeting, June 16-20, 1963, Atlantic City, N. J. F. J. L. Blasingame, executive vice president, 535 N. Dearborn, Chicago 10, Ill.

American College of Surgeons, Oct. 28-Nov. 1, 1963, San Francisco. Samuel P. Harbison, Secretary, 40 East Erie, Chicago 11, Ill.

Southern Medical Association, Nov. 18-21, 1963, New Orleans, La. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham 5, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 13-16, 1963, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Mississippi Academy of General Practice, Sept. 25-26, 1963, Jackson. Miss Louise Lacey, Executive Secretary, P.O. Box 1435, Jackson, Miss.

Amite-Wilkinson Counties Medical Society, First Tuesday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday Monthly, 6:30 p.m., Robert E. Lee Hotel, Jackson. Jim G. Hendrick, 800 Carlisle St., Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday March and First Wednesday November, 2:00 p.m., Clarksdale. Whitman B. Johnson, Jr., 422 McWilliams Building, Clarksdale, Secretary.

Coast Counties Medical Society, Second Wednesday, January, First Wednesday, March, May, July, September, November. Charles N. Floyd, 1619-23rd Ave., Gulfport, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. Robert M. Graham, 612 Dixie Towers, Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March and September. Robert B. Townes, Jr., 1196 Mound St., Grenada, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. Thomas W. Wesson, 420 Magazine, Tupelo, Secretary.

North Mississippi Medical Society, First Thursday April and October, Oxford. Marcus E. Morrison, 512 Van Buren Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucien Olen Crosby Memorial Hospital, Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. James C. Bass, Jr., 424-13th Ave., Laurel, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Tom H. Mitchell, The Street Clinic, Vicksburg, Secretary.



The President Speaking

'Work Without Ceasing'

C. P. CRENSHAW, M.D.
Collins, Mississippi

HOW MUCH BETTER it would be if this, my final message to my colleagues as your president, might be a personal letter to each physician. Since such a gesture is not possible, I shall ask you to regard these remarks as a personal communication. My family and I are deeply grateful for your generous and cordial reception of us throughout the 1962-63 association year. Wherever we traveled, we found your friendship, hospitality, and warm friendship a source of deep pride and satisfaction. We shall be forever grateful.

In my first message to you last year, I warned that the climate for professionalism in the United States had grown hostile as regards the national administration and some legislation. I said that the fabric and fiber of our free choice, private system of medical care is on trial. To me, this is still true and a shocking succession of events seems to document this assertion.

As I return to the rank and file of our membership, I shall continue to lend my support to the association as we work without ceasing for that system of medical care which has proved itself superior to any other in the world. Our tasks in the future will, if anything, be even more difficult because our opposition is powerful, astute, and obsessed with its political mission. These adversaries understand very well that we of medicine can lose only once.

Let nothing deter our high aims and good purposes. Let us, in the teeth of politically inspired programs and in the shadow of their possible enactment, continue to expand medical care in quality and quantity. Let us seek the best interest of the patient above all else. Let us be firm and uncompromising in our deep convictions. If we do these things, we can and shall prevail. ★★★

JOURNAL OF THE
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EDITORIALS

Today's Hospital—Career Center for American Youth

NOT ALL AMERICAN YOUNGSTERS aspire to become physicians nor could they for varied and obvious reasons. Yet many among these have active interests in the health service field and more important, the talents that are sorely needed in allied professional personnel. The theme of National Hospital Week which will be observed May 12-18 is "Today's Hospital—Career Center for American Youth." All this adds up to a unique career guidance opportunity for physicians who are so often called upon to counsel high school students.

Hospital careers offer rewarding experiences in the service of others when their personal need is greatest. But there are additional conpensations, too. There is close association with some of the most respected and gifted persons in the community, the opportunity of working as a member of a closely knit team whose accomplishments are important, the choice of remaining in one's home community or going almost anywhere else, and a horizon of almost unlimited opportunity.

Few realize that many hospitals list over 200 job classifications ranging from accountant to x-ray technician. Almost no area of the arts and sciences is unnoticed or unneeded by modern hospitals. Nor are unusual economic opportunities missing, either, for administration and executive fields are prominent in the management of these complex institutions.

Addressing itself to youth in search of life work, the American Hospital Association has this to say: "Just as it takes many skills to run a hospital, it takes all types of people, too. Hospitals need persons with a keen head for business, and those with compassionate understanding, a gentle touch—those who work well under pressure, others who prefer calm, orderly surroundings.

"They need extroverts and introverts, rugged individualists, people with imagination and the courage to try new ideas—those who work well with people and those who prefer working in the quiet of a laboratory or library."

There are nearly 7,000 hospitals in the United States into which about 24 million patients are admitted annually. Of the 1.5 million already in this career field, two out of three work behind the scenes away from the patient, many in interesting jobs rarely associated with the merciful mission of healing. More than two full time employees are on hand for every patient in the current census but the ratio is rapidly escalating to three-to-one.

The modern hospital was thrust into an educational role more than a century ago when Florence Nightingale founded the first school of nursing in London. Except for skills common to most

business and institutional endeavor, the hospital is now equipped to train its own allied professional staff. Indeed, for most of the highly technical paramedical careers, the training is not available elsewhere.

Isn't American Hospital Week of 1963 a good time to encourage promising high school students toward rewarding lives of service?—R.B.K.

For New Frontiersmen Only

The *Clarion-Ledger,* Mississippi's biggest morning newspaper and a respected bulwark of conservatism, had this story in its editorial columns on compulsory federal medical care which had been extended to its logical conclusion:

In the Utopia of the future, a man felt ill one morning and sought medical care in the multimillion dollar federal building. Upon entering, he found himself faced with a bewildering array of doors, each marked with the name of an ailment, heart, cancer, appendicitis, and what-have-you. Believing he had appendicitis, he entered the door so designated. He found himself in a marble corridor with two more doors marked "male" and "female," respectively.

Entering the proper door, he found himself confronted with two more, one labeled "married" and the other, "single." Having previously taken a wife, he passed through the former portal only to encounter two additional doors, "Democrat" and "Republican." A dedicated supporter of GOP candidates, the patient stepped through the door marked "Republican"—and fell nine stories into the alley below.

No Smoking, Please

The giant California Medical Association has a habit of making medical history. In fact, CMA has done it again, becoming the first state medical association to adopt a policy proclaiming cigarette smoking harmful. No other state group has previously adopted such a policy.

Turning thumbs down on stronger proposals condemning smoking as injurious, the California House of Delegates voted "to publicize the harmful effect of smoking." An anticigarette campaign, aimed at school age groups, will be implemented by the association's administrative council.

NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

EDWARDS, NICHOLAS HENRY, Holly Springs. Born Amarillo, Texas, July 23, 1924; M.D., University of Tennessee College of Medicine, Memphis, 1956; interned John Gaston Hospital, Memphis, Tenn., one year; corporal, U. S. Air Force, two years; elected March 20, 1963, by North Mississippi Medical Society.

HARRIS, JAMES EARL, Hattiesburg. Born Hollandale, Miss., Sept. 5, 1928; M.D., Tulane University School of Medicine, New Orleans, La., 1955; interned University of Mississippi School of Medicine, Jackson, one year; residency, Medical College of Alabama, Birmingham, three years; residency, School of Aviation Medicine, San Antonio, Texas, two months; captain, U. S. Air Force, two years; elected Dec. 19, 1962, by South Mississippi Medical Society.

KEEL, DANIEL TALMADGE, JR., Brookhaven. Born Oxford, Miss., Jan. 28, 1933; M.D., University of Tennessee College of Medicine, Memphis, 1956; interned Baroness Erlanger Hospital, Chattanooga, Tenn., one year; radiology residency, Kennedy VA Hospital, Memphis, Tenn., three years; captain, U. S. Army, two years; elected Dec. 12, 1962, by Tri-County Medical Society.

PEARCE, HERBERT RAY, New Hebron. Born Smithville, Miss., April 19, 1929; M.D., University of Mississippi School of Medicine, Jackson, 1961; interned Duval Medical Center, Jacksonville, Fla., one year; U. S. Navy, five years; elected Dec. 12, 1962, by Tri-County Medical Society.

WHITE, WILLIAM BOYCE, Laurel. Born Ripley, Miss., April 15, 1931; M.D., University of Mississippi School of Medicine, Jackson, 1957; interned Confederate Memorial Medical Center, Shreveport, La., one year; residency, U. S. Navy School of Aviation Medicine, Pensacola, Fla., six months; lieutenant, U. S. Navy, four years; elected Dec. 13, 1962, by South Mississippi Medical Society.

THE LITERATURE

Book Reviews

Disturbances of Heart Rate, Rhythm, and Conduction. By Eliot Corday, M.D., Assistant Clinical Professor of Medicine, School of Medicine, University of California, Los Angeles, and David W. Irving, M.D., Clinical Assistant, School of Medicine, University of California, Los Angeles. 357 pages with illustrations. Philadelphia: W. B. Saunders Company, 1961. $8.50.

This is a new book covering the field of arrhythmias from premature systoles to cardiac arrest. As might be expected, electrocardiographic illustration is relied upon heavily, and over two hundred excellent EKG drawings and schematic illustrations are found in the 357 pages.

The first 13 chapters take up the description of rhythm disturbances in detail, giving the etiology, mechanism, hemodynamics, symptoms, signs, electrocardiogram, treatment, and prognosis of each disorder.

Later chapters include a valuable review of conduction defects associated with myocardial infarction and another on arrhythmias associated with surgery and anaesthesia as well as a final chapter reviewing the uses of drugs used in treatment of arrythmias.

The chapter on hemodynamic disturbances is somewhat repetitive and is primarily a review of the authors own research studies, replete with bar graphs of blood flow and vascular resistance.

The book is lucid in style and easy to follow. While written primarily for the medical student and house officer, it should be an aid to anyone who must treat arrhythmias. It can be used as a reference manual since each disorder is covered individually in the initial chapters. A lengthy bibliography is appended to the book. The discussions of drugs are quite practical. The authors are quite conservative in the use of cardiac glycosides intravenously, advising very limited use of these drugs, contraindicating them after myocardial infarction.

FRANK J. BAIRD, M.D.

Journal Reviews

A Comparison of Promazine and Paraldehyde in 175 Cases of Alcohol Withdrawal. William P. Hart: Am. J. Psychiat. 118:323 (Oct.) 1961.

The author reports a study of 222 patients at the Monroe County Psychiatric Hospital Unit who exhibited an alcohol withdrawal syndrome. The study, made in connection with the Department of Psychiatry, University of Rochester School of Medicine, compared the three following regimes: (1) promazine and paraldehyde, (2) promazine alone, and (3) paraldehyde alone. Twenty-one per cent of the total 222 patients (47) were excluded from the study because they had been on other drugs before admission, had some primary psychiatric illness, suffered from severe medical illness, had not been drinking a sufficient time, suffered from chronic brain syndrome, or left before the study could be completed. The actual study then was conducted on 175 patients distributed among the three regimes named above in the proportion of promazine-paraldehyde treatment, 62 patients; promazine alone, 57 patients, and paraldehyde alone, 56 patients.

The withdrawal syndrome from prolonged use of alcohol was diagnosed when the patient exhibited anxiety, agitation, tremor, loss of appetite, and insomnia. In somewhat over one-fourth of the patients, delirium tremens was also present, adding to the above symptoms hallucinations and/or delusions, and a sensorium defect. Cases of alcoholic hallucinosis were not included in the study.

There was essentially no psychotherapy as such administered to these patients. An attempt was made, of course, to maintain a psychotherapeutic attitude among the personnel.

During the first four weeks of a 24-week period all patients admitted were treated with promazine and paraldehyde. All patients admitted during the second four-week period were treated with promazine alone, and during the third four-week period all patients admitted were treated with paraldehyde alone. This rotation of treatment was repeated through a second cycle (the last half of the 24-week period). In addition to the paraldehyde and/or promazine all patients in all groups were

given Vitamin B complex intramuscularly for three days and multiple vitamins orally every day while in the hospital. In general, the basic orders were as follows for the promazine-paraldehyde group: initial intramuscular injection of 100 mg. of promazine, followed by 100 mg. of promazine by mouth q.i.d. In addition to this, they received 6 cc. of paraldehyde every four hours by mouth as needed. The second group had an initial injection of 100 mg. of promazine intramuscularly and then 100 mg. of promazine every three hours by mouth as needed. The third group received 6 cc. of paraldehyde by mouth every three hours as needed.

The promazine group were able to leave the hospital at the end of the fourth day in almost twice the numbers of either of the other two groups. At the end of the fourth day only 28 per cent of the promazine group remained in the hospital, while 66 per cent and 61 per cent of the paraldehyde group and the promazine-paraldehyde group, respectively, were still in the hospital.

Gross reporting on all three shifts was made by those caring for the patients on these three categories: (1) agitation and anxiety, (2) sleeping poorly, and (3) eating poorly. Just as one might expect, the promazine group had the most rapid disappearance of these undesirable symptoms. The patients with actual delirium tremens fared better under promazine as compared to paraldehyde, or promazine-paraldehyde, in just about the same proportions as those with the less severe withdrawal syndromes.

Approximately twice as many of the patients treated with promazine and promazine and paraldehyde had seizures, as compared with those treated with paraldehyde alone. However, it should be noted that none of the patients were given Dilantin as part of the overall treatment routine.

This study indicates that promazine is preferable to both paraldehyde and promazine-paraldehyde therapy in alcohol withdrawal and delirium tremens. This reviewer suggests that the use of Dilantin might materially reduce the likelihood of convulsions among patients treated with promazine. There was unanimity that ward management of the patients was easier in the case of those treated with promazine alone and, while a number of hypotensive episodes occurred in the promazine treated group, there was no attempt to follow the blood pressure and match the dosage to blood pressure findings. The introduction of this feature into the regime would probably minimize the occurrence of hypotensive episodes.

OSCAR E. HUBBARD

Books Received

The Management of the Anxious Patient. By Ainslie Meares, M.D. 493 pages. Philadelphia: W. B. Saunders Company, 1963. $9.00.

Surgery. By Richard Warren, M.D., in collaboration with members of the Department of Surgery of the Harvard Medical School. Illustrations by Janis Cirulis. 1397 pages. Philadelphia: W. B. Saunders Company, 1963. $19.50.

Synopsis of Pediatrics. By James G. Hughes, M.D., Professor of Pediatrics and Chairman of the Department of Pediatrics, University of Tennessee College of Medicine, Memphis, with the collaboration of 20 faculty members of the University of Tennessee College of Medicine. 1031 pages with illustrations. St. Louis: The C. V. Mosby Company, 1963. $9.85.

Endocrine and Metabolic Aspects of Gynecology. By Joseph Rogers, M.D., Associate Professor of Medicine and Lecturer in Gynecology and Obstetrics, Tufts University School of Medicine. 189 pages with illustrations. Philadelphia: W. B. Saunders Company, 1963. $8.00.

Current Therapy. Edited by Howard F. Conn, M.D. 775 pages. Philadelphia: W. B. Saunders Company, 1963. $12.50.



"This looks like a good place to start!"

St. Paul, NBCU Carriers Revise Liability Rates; Premiums Will Be Reduced for Most Physicians

Major revisions in professional liability insurance premium rates recently filed will affect most Mississippi physicians. For state medical association members participating in the St. Paul Com-

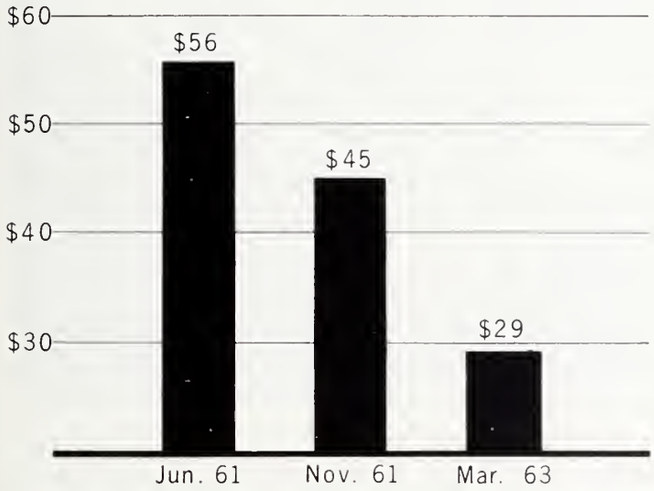


Figure 1. Professional liability insurance premiums for nonsurgical coverage decreased 48 per cent for MSMA members during the period June 1961-March 1963. Dollar savings on 100/300 policy is $56 annually.

panies program sanctioned by the association in 1961, the rate revisions will generally add up to a reduction, the second since inception of the plan. The revisions for insurance carriers who are members of the National Bureau of Casualty Underwriters became effective April 1. The St. Paul organization filed revisions to be effective March 15.

The unique feature of the new rate structures is a classification system relating to the type of practice a physician conducts. For those doing no surgery other than "incision of boils and suturing of skin," the rate drops to $29 for St. Paul and $31 for NBCU companies for the basic 5-and-15 limits. This is Class I.

The second category includes physicians who perform minor surgery and obstetrical procedures, neither constituting major surgery. For them, the basic St. Paul and NBCU rate is $39. Class III extends to physicians doing surgery, applying to general practitioners assisting at or performing surgery, proctologists, and ophthalmologists with a common rate of $74 for 5-and-15 limits.

Class IV applies to surgeon specialists, cardiac surgeons, urologists, neurological surgeons, obstetrician-gynecologists, orthopaedic surgeons, otolaryngologists, plastic surgeons, general, thoracic, and vascular surgeons. For basic limits, the St. Paul premium is $99, while $112 is charged by NBCU carriers. Additional premium charges with respect to x-ray therapy, electroshock therapy,

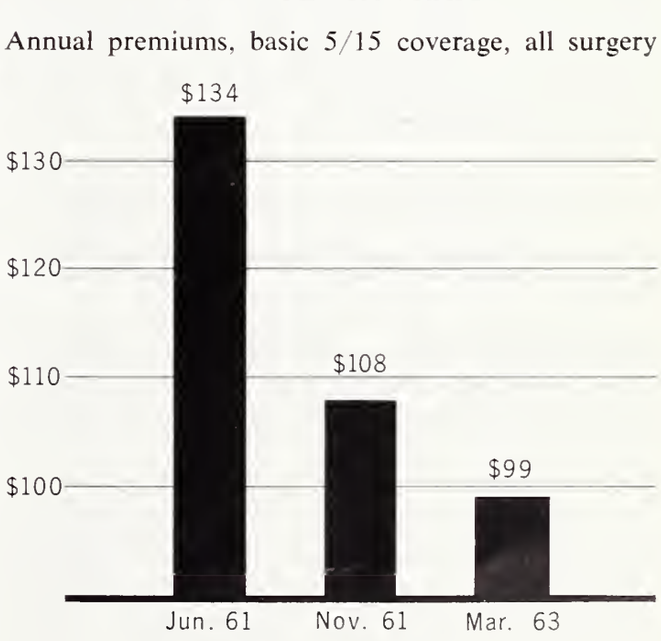


Figure 2. Coverage for all surgery in the highest professional liability classification decreased in premium cost 26 per cent since inception of the St. Paul program in 1961. Annual dollar savings on 100/300 is $72.

employed physicians, and partnership liability will be continued by all companies.

Action in the St. Paul filing results in the second reduction in premium levels since November of 1961. Except for reclassification of some few physicians to higher premium categories, the revision will lower all rates for professional liability coverage in this particular program. The NBCU changes will result in some decreases and some increases, notably in Classes I and IV. Internists get across-the-board reductions, but Class IV surgeons under NBCU coverage will experience rate hikes.

With the April 1 NBCU filing, the two rate structures differed substantially on coverage of anesthesiologists. St. Paul classifies this specialty in group III, whereas NBCU puts it in IV. On limits of 100-and-300, St. Paul premiums would be $152 against NBCU's $230 for anesthesiologists. It was not known if adjustments would be made at the time of the filings.

Since House of Delegates sanction of the St. Paul program (which sanction does not exclude other professional contracts which have been demonstrated as effective and trustworthy) in May of 1961, dollar savings in annual premiums per year on 100-and-300 coverage is $56 for those doing no surgery and $72 for physicians doing all surgery.

The announcement stated that local insurance agents should have full information on the new classification system and rate structures by mid-May. Rates become official when approved by the Mississippi Insurance Commission with which all such filings are made.

Ob-Gyn Section To Discuss Sterilization and the Law

Four papers on sterilization and the law will be presented before the Section on Obstetrics and Gynecology, one of seven scientific sections meeting during MSMA's upcoming 95th Annual Session.

Scheduled for May 13-16 at the Buena Vista Hotel in Biloxi, the 1963 annual meeting will feature 13 guest essayists and 15 state essayists in its scientific sessions. In addition, around 25 scientific papers will be presented before specialty societies meeting concurrently with MSMA.

To open the Section on Obstetrics and Gynecology, Dr. John E. Lindley of Meridian will discuss "Sterilization and the Law in Mississippi." Dr. Robert Barnett, professor of obstetrics and gynecology, Medical College of Alabama, Birmingham, Ala., will speak on "Methods of Contraception." A Connecticut physician, Dr. Charles L. Buxton of New Haven, will review "Medico-Legal Problems in Connecticut," and Bernard D. Hirsh of Chicago, director, Law Department, American Medical Association, will consider "The Legal Status of Sterilization Procedures."

Out-of-state essayists appearing before the May 14 Meeting of the Section on Medicine will be Dr. John H. Seabury of New Orleans, professor, Department of Medicine, Louisiana State University School of Medicine, and Dr. Jarrell E. Miller of Dallas, chief of radiology, Baylor University Medical Center. Dr. Seabury's topic will be "Management of Staphylococcal Septicemia and Pneumonia" and Dr. Miller will discuss "Basic Concepts of Roentgen Diagnosis."

Two Jackson internists, Dr. Joseph P. Melvin and Dr. Guy T. Gillespie, Jr. will also address the section.

Dr. Daniel C. Riordan of New Orleans and Dr. Frederick H. Bowen of Jacksonville, Fla., will be the guest essayists before the Section on Surgery which meets Tuesday, May 14. Dr. Riordan will speak on "Surgery of the Hand" and Dr. Bowen will discuss "Post Thrombo-Phlebitic Syndrome."

Also appearing before the section will be Dr. George H. Martin of Vicksburg and Dr. Richard H. Clark, Jr., of Hattiesburg.

Members attending the May 14 meeting of the Section on Preventive Medicine will hear Dr. Milton Terris of New York discuss "The Epidemiologic Approach to Chronic Diseases." Dr. Terris heads the Chronic Disease Unit of the Public Health Research Institute of the City of New York.

State speakers addressing the section will include Dr. Shelby W. Mitchell of Laurel and Robert R. Rester and Joe Q. Monaghan of the State Board of Health.

Two guest essayists, Dr. Gerald H. Holman of Kansas City, Kan., and Dr. Dorothy E. Brinsfield of Atlanta will address the Section on Pediatrics, which meets Wednesday, May 15. Dr. Holman will speak on "Malabsorption Syndrome in Infancy," and Dr. Brinsfield, who is clinical instructor, Department of Pediatrics, Emory University School of Medicine, will discuss "Rheumatic Fever."

Dr. Julian R. Youmans and Dr. John J. White, both of Jackson, will also address the section.

Meeting on Thursday, May 16, the Section on General Practice will feature Dr. James W. Culbertson of Memphis, Tenn., who will speak on "Treatment of Hypertension." State speakers before the section will be Dr. John C. Longest of

State College, Dr. Walter W. Crawford of Tylertown, and Dr. Hans K. Stauss of Jackson.

Dr. G. Victor Simpson of Washington, D. C., and Dr. Lyle M. Sellers of Dallas, professor of clinical otolaryngology, Southwestern Medical School, University of Texas, will be guest essayists for the Section on Eye, Ear, Nose, and Throat. The section will meet on Thursday, May 16. Dr. Simpson will discuss "Uveitis—Modern Diagnosis and Therapy," and Dr. Sellers will talk on "Testing the Hearing—Techniques of Testing, Interpretation, Therapeutic Guidance."

Dr. Emmett M. Herring, Jr., of Hattiesburg will also address the section.

Dr. Dunn First To File Keogh Plan



First MSMA member to file his Keogh voluntary retirement plan with the Deposit Guaranty Bank under association sponsorship is Dr. Russell A. Dunn of Jackson, second from left. Looking over his plan are the three top general officers, from the left, Drs. C. G. Sutherland, secretary-treasurer; Dr. Dunn; C. P. Crenshaw, president; and John G. Archer, president-elect. Dr. Dunn's plan includes himself and one employee with more than three years' service.

Board of Health Publishes Immunization Manual

An immunization policy and practice manual has been compiled and published by the Division of Preventable Disease Control of the Mississippi State Board of Health. Covering subjects from agammaglobulinemia to yellow fever, the publication constitutes a new and up-to-date reference source. It will be used as a guide and has been distributed to county health departments throughout the state.

Special reprints of pertinent sections have been made for physicians in private clinical practice. Included in the reprints are data on recommendations and guides for use of immune serum globulin and management of human exposure to rabies. Copies may be secured from county health departments, state board officials said.

PMA Urges Approval Of Increased Funds for FDA

In an unprecedented move, the pharmaceutical industry has appealed formally to both houses of Congress for approval of the Kennedy administration's heavy budget requests for the administration of the new drug laws and regulations.

A statement filed with Senator Lister Hill's Labor and Public Welfare Committee April 4 said the increased funds were necessary for FDA to operate in the best interests of the public, medicine, and the drug industry.

Dr. Theodore G. Klumpp, member of the board of directors of the Pharmaceutical Manufacturers Association and president of directors of Winthrop Laboratories, presented the statement. A week earlier, he appeared before Rep. John Fogarty's House subcommittee on health and made the same plea.

If the requests for FDA are approved, its drug staff will double to 547. Dr. Klumpp endorsed this increase and also gave special support to a $269,000 request for automatic data processing and establishment of a scientific information exchange program within FDA, to cope with "the flood of new information that will be pouring into FDA" under the new drug law. He said a $14 million construction program for the agency cannot be refused without seriously damaging FDA's scientific programs.

Medicine Faces 3 Challenges, Dr. Long Tells ICS Meet

Medicine is daily being challenged on three fronts, Dr. Lawrence W. Long of Jackson told physicians attending the North American Federation Meeting of the International College of Surgeons held April 20-25 in Los Angeles.

Addressing the General Assembly of the Federation's 28th Annual Congress, Dr. Long said that the first challenge was to the fabric and fiber of the traditional, free choice system of medical care.

"In the United States," he said, "never has a profession in history faced repeated and consecutive legislative crises of graver import than has been our experience during the past two decades."

The second challenge, continued Dr. Long, is the problem of extending and improving medical care, and the third challenge is the preparation of physicians for greater service and a much broader exercise of leadership.

"In a word," said Dr. Long, who is ICS regent for Mississippi, "if we fail to shape medicine's destiny, you may rest assured that it will be shaped for us and without us."

Dr. Long warned the group that medicine must acknowledge that the medical profession is in a defensive posture, that such initiative as it has seems to be diminishing, and that the margins of comfort in all but pure science grow thinner each time the profession is tried in the fires of legislative debate and in the forum of public opinion.

He reviewed the current programs of medical education recommending greater emphasis on the "three E's," "ethics, economics, and elocution."

Without a greater effort on the part of every physician, concluded Dr. Long, tomorrow it may not be our prerogative as physicians to appraise our problems. "It may be ours only to act as scientific servants of a society that outpaced us in a century when our greatest victories over disease and illness were realized," he said.

In addition to serving as ICS regent for Mississippi, Dr. Long is secretary of the general surgical section of ICS and vice president of the United States Section. In May 1962 he addressed the Second Congress of the European Federation of ICS which convened in Amsterdam, the Netherlands.

AMA Annual Meeting Set For June 16-20 in Atlantic City

The 112th annual meeting of the American Medical Association will be held June 16-20 in Atlantic City. An attendance of 15,000 physicians is anticipated.

AMA President, Dr. George Fister, said that with "better transportation facilities to Atlantic City and more up-to-date room accommodations, attendance at the '63 meeting should be high."

"Since we last met there," Dr. Fister said, "more than 4,000 new motel rooms have been provided. The auditorium has been renovated, including new escalators and additional floor space. The convention bureau has arranged for a new type of air-land shuttle service between Philadelphia and Atlantic City."

The Multiple Discipline Research Forum will be presented again, in which more than 200 short papers will be presented, reporting on original investigation of fundamental problems in medicine. Chairman is R. Edwin H. Ellison of Milwaukee.

The scientific program will include eight general scientific sessions, dealing with strokes, genetics, cancer, chemotherapy, peptic ulcer, myocardial infarction, backaches, obesity, and venereal disease.

The session will mark the 17th time that the AMA has met in Atlantic City since 1900. At the last meeting there, in 1959, the total attendance was 32,882, including 13,143 physicians.

Dr. David B. Allman, who practiced surgery in Atlantic City for 35 years and is a past president of the AMA (1957-58), is honorary chairman of arrangements. The local chairman is Dr. Charles Hyman.

Scientific sessions of the meeting will be held in the City Auditorium, on the boardwalk facing the Atlantic Ocean. Scientific meeting rooms and industrial exhibit will be on the boardwalk level of the Auditorium. Scientific exhibits will be on the Auditorium's lower level. A few scientific sessions will be held in hotels near the auditorium.

The Traymore Hotel and the new Colony Motel will be joint headquarters for the meeting. House of Delegates sessions will be held at the Traymore. Woman's Auxiliary headquarters will be the Chalfonte-Haddon Hall Hotel.

Council Heads Review Year's Activities



MSMA's chairman and vice chairman of the Council on Medical Service are smiling over the year's activities. They are, from the left, Drs. Guy T. Vise of Meridian, chairman, and M. Q. Ewing, Amory, vice chairman. Scene is recent final meeting of council at Jackson for 1962-63 year.

University Receives $13,068 From AMA-ERF



Dr. Robert Q. Marston, dean of the University of Mississippi School of Medicine, left, is the happy recipient of $13,068.74, gift to the university by Mississippi physicians through the American Medical Association Education and Research Foundation. MSMA President C. P. Crenshaw, center, approves proceedings as AMA-ERF Chairman Raymond F. Grenfell of Jackson makes presentation of check.

Abstracts Due May 15 For AHA Annual Meet

The 1963 Annual Meeting and Scientific Sessions of the American Heart Association will be held in Los Angeles Oct. 25-29. The three-day Scientific Sessions are scheduled from Friday, Oct. 25, through Sunday, Oct. 27, at the Hotel Biltmore.

May 15, 1963, is the deadline for submitting abstracts of papers to be presented at the Scientific Sessions. Papers must be based on original studies in, or related to, cardiovascular disease. Forms for submitting abstracts may be obtained from Dr. Richard E. Hurley, Medical Associate, American Heart Association, 44 East 23rd St., New York 10, N. Y.

Registration fee for the scientific program is $15 for all those who are not members of Heart Associations or of AHA Councils. Also excluded from payment of the fee are medical students, house officers, research fellows, graduate students, and members of the U. S. Armed Forces. The fee will be prorated for participating para-medical groups, according to length of sessions held in their fields of interest.

Applications for scientific exhibit space are also available from Dr. Hurley. These must be returned no later than May 15, 1963. Requests for industrial exhibits space may be made through Steven K. Herlitz, Inc., 280 Madison Ave., New York 16, N. Y.

Ob-Gyn Board Sets Deadline for Applications

Applications for certification in the American Board of Obstetrics and Gynecology, letters requesting reopening of applications, and requests for re-examination are now being accepted, according to Dr. Robert L. Faulkner, executive secretary.

All applications and letters of request must be submitted by July 1, 1963, and accompanied by current duplicate lists of patient dismissals for the preceding 12 months, Dr. Faulkner said.

Further information may be secured from Dr. Faulkner at 2105 Adelbert Road, Cleveland 6, Ohio.

Dr. Hardy Is Banks Lecturer At University of Liverpool

Dr. James D. Hardy, chairman of the Department of Surgery at the University of Mississippi School of Medicine, delivered the William Mitchell Banks Memorial Lecture at England's University of Liverpool during the first week in April.

Dr. Hardy's paper was titled "Homotransplantation of Tissues." He is one of only three Americans ever invited to present the Banks lecture. The other two were Dr. Harvey Cushing and Dr. Edward D. Churchill.

UMC Begins Construction On Nurse Education Building

Construction on the new nurse education building at the University of Mississippi Medical Center began in April.

The two-story $330,000 building will provide critically needed auditorium, classroom, laboratory, and office space all under one roof, besides allowing for the spiraling enrollment which dates from the school's opening in 1948.

Among the educational innovations incorporated in plans is closed circuit television for every classroom, according to Miss Christine Oglevee, dean.

Liquor Cures All Says Archaic Ad

The fast, Fast, FAST relief ads currently running on TV have absolutely nothing on their turn-of the-century counterparts, says Dr. B. B. O'Mara of Biloxi.

In the MSMA office a few weeks ago for a Board of Trustees meeting, Dr. O'Mara brought along a well-aged box which once contained a popular brand of distilled spirits. The box and its all-but-empty bottle were recently found among the effects of an elderly maiden lady of Biloxi.

Now sold primarily for "social" purposes, the liquor was then billed as "THIS GREATEST OF AMERICAN MEDICINE." In the multiplicity of 6-point type filling the six sides of the container, the makers guarantee their product will cure no less than 25 syndromes—some of which are still puzzling today's physicians.

To begin with, says the prospectus, the product is "highly recommended in general debilitated and run-down conditions of the system. It tones up stomach and digestive organs, increases the appetite, and aids digestion by its local effect upon the stomach and by stimulating the nerve and arterial center, hence is an excellent STOMACH TONIC and is especially useful in treating CHRONIC INDIGESTION."



Dr. B. B. O'Mara of Biloxi shows old-timey liquor wrapper to MSMA Staffer Dolores Herring. Recommended as "A Constitutional Tonic," the liquor was guaranteed to help no less than 25 medical conditions. The container and bottle were found among the effects of an elderly Biloxi woman.

Guaranteeing that the liquor is not contra-indicated by fever, the makers claim, "Its value is unexcelled in typhoid and other low fevers." "It is an excellent Prophylactic," they continue, "and therefore renders the system immune from various diseases." It is also said to be "especially useful in treating chronic conditions where a lack of nutrition is evident."

The average dose is one tablespoonful three times a day, recommends the wrapper, and this, the suffering patient is assured, "has proven meritorious in treating Pulmonary conditions, La-Grippe, Influenza, Colds, Bronchitis, Fevers, Stomach complaints, Weakness of the Stomach and other Digestive Organs, Malaria, exhaustion due to mental or bodily over-work, run-down conditions of the nerves, Sleeplessness, Weakness of convalescence and Debility of old age and . . . has no equal in the treatment of the various Menstrual disorders."

Having thus dispensed with all internal problems, the makers wind up by recommending their product as an antiseptic dressing for external wounds, ulcers. . . .

As Dr. O'Mara observed, "It makes you wonder why anyone ever bothered with penicillin and the rest of the antibiotics."

Dr. Johnson Is Guest Essayist For Delta Society Meeting

Dr. Samuel B. Johnson of Jackson was guest essayist for Delta Medical Society's 79th Semi-Annual Meeting conducted April 10 in Belzoni.

Dr. Johnson, who is a professor in the Department of Ophthalmology, University of Mississippi School of Medicine, spoke on "Glaucoma."

Other essayists included Dr. V. Frank Carey of Greenville, who spoke on "Unusual Urological Experiences"; Dr. Albert Azordegan of Jackson, who discussed "Nervous System Injury," and Dr. John D. Wofford of Greenwood, who spoke on "Scleroderma."

Dr. Boyce M. Skinner of Greenwood talked on "Current Status of Tuberculosis in the Delta Medical Society Area," and Dr. Winfred L. Wiser of Greenville spoke on "The Management of Abruptio Placentae."

Discussers were Drs. Charles H. Harrison, Jr., of Greenville; Ira B. Bright of Greenwood; John E. Rawls of Inverness, and William P. Simmons of Arcola.

Dr. S. G. Mounger of Greenwood is president of Delta Society, and Dr. T. M. Riddell of Shaw is president-elect. Dr. Howard A. Nelson of Greenwood is secretary-treasurer.

State Heart Association Names 1963-64 Officers



Elevated to the presidency of the Mississippi Heart Association at its annual meeting March 28, Joseph Latham of Jackson (second from left) will head the voluntary health organization during the coming year, succeeding Dr. Lucian Ferris of Vicksburg. Dr. Raymond F. Grenfell of Jackson (left) was named president-elect; Dr. Eugene Murphey, Jr., of Tupelo (second from right) is vice-president, and Boswell Stevens of Macon is new secretary. S. C. Hart of Jackson (not pictured) was re-elected treasurer, a position he has held since 1953.

SMA Announces Plans For 57th Annual Meeting

Doctors will have quite a variety of scientific programs to select from when the 57th Annual Meeting of the Southern Medical Association is held in New Orleans Nov. 18-21, 1963.

The four-day scientific meeting, which annually attracts some 5,000 to 6,000, will feature 48 half-day sessions of 21 medical specialty programs, a symposium on the thermal technics in medicine and a symposium on malignancies, a special two-part program for science writers, eight closed-circuit color television programs, and scientific and technical exhibits.

Dr. Edward R. Annis, president-elect of the American Medical Association, will be the featured speaker at the President's Luncheon on Tuesday, Nov. 19, it has been announced by Dr. Daniel L. Sexton, St. Louis, president of the Southern Medical Association.

Senior medical students from 31 southern medical schools, selected by their classmates, will attend the entire meeting as guests of the association. This program is designed to permit these young doctors of the future to see a full-scale medical meeting in progress.

Several other medical groups will meet conjointly with the Southern Medical Association, participating in the programs and activities of the association as well as their own specialty meetings. Some of these groups are the American College of Chest Physicians, Southern Chapter; College of American Pathologists; the Radiological Society of North America; and the Southern Gynecological and Obstetrical Society. The association will cooperate with the College of American Pathologists in holding a workshop on professional problems of the pathologist, which will be primarily for senior pathology residents. Radiology Refresher Courses will be co-sponsored by the association and the Radiological Society of North America.

More than a dozen medical school alumni groups have already made plans to hold alumni reunions during the meeting. Social activities sponsored by the association include a golf tournament, President's Luncheon, President's Night Dinner-Dance, the Woman's Auxiliary Doctors' Day Luncheon, and numerous activities for the ladies.

Active preparations for the meeting are being carried out by the general officers, section officers, members of the association, and members of the Orleans Parish Medical Society. Attendance at this meeting is expected to reach an all-time high.

Officers from Mississippi who are assisting in the formulation of the program are Dr. Guy T. Vise, Meridian, councilor; Dr. Jesse T. Davis, Corinth, associate councilor; Dr. Raymond F. Grenfell, Jackson, associate councilor and chairman-elect, Section on Medicine; Dr. Howard A. Nelson, Greenwood, associate councilor; Dr. Robert E. Schwartz, Hattiesburg, associate councilor; Dr. James T. Thompson, Moss Point, associate councilor; Dr. J. P. Culpepper, Jr., Hattiesburg, member, Board of Trustees; Dr. Stanley A. Hill, Corinth, member, Editorial Board; Dr. Robert D. Sloan, Jackson, chairman, Section on Radiology.

PERSONALS

FRANK M. DAVIS of Corinth has been named a member of the Tennessee-Tombigbee Waterway Development Authority. Dr. Davis was appointed to a four-year term by Governor Ross R. Barnett,

who is currently serving as chairman of the four-state authority.

R. J. FIELD, JR. has been named president of the Centreville Chamber of Commerce.

HOWARD A. NELSON of Greenwood has been named vice chairman of the AMA Committee on Maternal and Child Care. Dr. Nelson has served with the committee since 1953.

WILLIAM K. PURKS of Vicksburg was re-elected as a governor of the American College of Physicians at the organization's 44th Annual Session in April.

JOHN R. SHELL has been elected president of the Vicksburg Lions Club for 1963-64.

DAVID W. YOUNG has joined the staff of the Street Clinic as a member of the Department of Surgery. A native of Greenwood, Dr. Young received his medical degree from the University of Mississippi School of Medicine. He has served as a resident at the Baptist Hospital in Memphis for the past four years.

FRANK M. WIYGUL of Jackson has been named a director of the newly organized Mississippi Council on Epilepsy.

State Morbidity Reported Through March 22

The Mississippi State Board of Health reports the following occurrence of morbidity for 1963 through the 12th week of the year, ending March 22, 1963. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	204
Tuberculosis, O.F.	6
Salmonella infections	7
Dysentery	
Bacillary	15
Amebic	3
Diarrhea of Newborn	1
Septicemia, Staph.	11
Meningococcus infection	
Meningitis	4
Meningitis, O.F.	8
Mononucleosis, infectious	34
Hepatitis, infectious	203
Helminthic infections	
Hookworm	330
Ascariasis	83
Strongyloides	7
Rheumatic Fever	2
Histoplasmosis	1
Streptococcus infections	
Scarlet fever	149
Strep throat	952
Pertussis	22
Measles	191
Chickenpox	550
Tetanus	1
Mumps	294
Other complications of smallpox vaccination	1
Influenza	30,680
Gonorrhea	1,092
Syphilis	
Early	74
Late	39

DEATHS

AKIN, CHARLES VIVIAN, Shubuta. M.D., Tulane University School of Medicine, New Orleans, La., 1911; interned Touro Infirmary, New Orleans, La.; assistant surgeon general, U. S. Public Health Service, 1914-1944; director of the Clarke-Wayne Health Department, 1944-1961; died March 21, 1963, aged 72.

DONALDSON, FRANK ALBIRTO, Jackson. M.D., University of Tennessee College of Medicine, Memphis, 1931; interned St. Joseph Hospital, Memphis, Tenn., one year; residency, Department of Mental Hygiene, New York State, at Creedmoor State Hospital in Queens Village and Brooklyn State Hospital; member, American Psychiatric Association, Southern Psychiatric Association, and the Mississippi Psychiatric Association; former assistant superintendent at the Mississippi State Hospital, Whitfield, and superintendent at the Louisiana State Hospital, Jackson; clinical assistant professor, University of Mississippi School of Medicine, Jackson, since 1956; Diplomate, American Board of Psychiatry and Neurology; commander, U. S. Navy, four years; died March 18, 1963, aged 58.

HICKMAN, WILLIAM WALTER, Noxapater. M.D., Memphis Hospital Medical College, Tenn., 1902; received certificate from the University of Tennessee College of Medicine, Memphis, for 50 years of medical service; former superintendent, Ellisville State School, Miss.; died March 19, 1963, aged 84.

HILL, JAMES RUFUS LAWSON, Corinth. M.D., Memphis Hospital Medical College, Tenn., 1903; postgraduate training, Augustana Hospital, Chicago, Ill.; president, Alcorn County Medical Society, 1927; president, Northeast Mississippi Medical Society, 1929; served in the state House of Representatives in 1918 and from 1932-1936; president of the Mississippi State Medical Association, 1935-1936; awarded certificate from the University of Tennessee College of Medicine, Memphis, for 50 years of medical service; emeritus member of MSMA and member of the Fifty Year Club; died March 24, 1963, aged 90.

POOL, WINSTON CARL, Cary. M.D., Medical College of Alabama, Birmingham, 1914; member, American Academy of General Practice; lieutenant, U. S. Army, 1918; died March 20, 1963, aged 73.

WILSON, ROBERT ERMON, Greenwood. M.D., Johns Hopkins University School of Medicine, Baltimore, Md., 1926; interned Johns Hopkins University School of Medicine, Baltimore, Md., one year; member, American Academy of Pediatrics; Diplomate, American Board of Pediatrics; died March 16, 1963, aged 74.

AUXILIARY

South Mississippi Lists New Officers

Mrs. W. R. Raulston of Hattiesburg has been named president of the South Mississippi Medical Auxiliary. She succeeds Mrs. Dan Reikes, also of Hattiesburg.

Other officers are Mrs. Hugh Barnes of Petal, president-elect; Mrs. Reikes, vice president; Mrs. Carl Hale, secretary, and Mrs. Ed Attix, treasurer.

Mrs. Crouch To Head Central Medical Auxiliary

Central Medical Auxiliary named new officers during its final meeting of the 1962-63 year. Mrs. William Lewis Crouch was elected to succeed Mrs. J. Gordon Dees as president.

Other officers include Mrs. William C. Warner, president-elect; Mrs. Thomas J. Marland, vice president; Mrs. Charles Caccamise, Jr., secretary; Mrs. Clarence Webb, treasurer; Mrs. Chester Hamilton Lake, parliamentarian, and Mrs. Lucian Hodges, historian. All are from Jackson.

AMA Auxiliary Announces Annual Session

An address by a member of the House Ways and Means Committee, discussion of suicide prevention programs, a report on Project HOPE, and a special award to television actress Donna Reed will highlight the 40th annual convention of the Woman's Auxiliary to the American Medical Association.

Emphasizing community service and methods of communicating with both the profession and the public, a special program has been planned for physicians' wives attending the June 16-20 meeting at Atlantic City's Haddon Hall Hotel.

Among the speakers featured on Tuesday, June 17 will be Rep. Bruce Alger (R-Texas), who will discuss "Doctors' Concern with Federal Legislation," and Dr. William B. Walsh, president, People-to-People Health Foundation, who will report on Project HOPE activities.

Also scheduled to appear are Louis F. Lucas, executive director, National Rifle Association of America, who will outline a gun safety program designed for the local level, and Mrs. Haven Smith, chairman, Women's Activities, American Farm Bureau Federation. Mrs. Smith will emphasize the cooperative work being done in rural health by the auxiliary and the federation.

A report on the auxiliary's civil defense program will highlight medical self-help training. Recruitment techniques will be emphasized in the health careers program discussion.

Methods of telling both the medical profession and the public about auxiliary service projects will be discussed by Mrs. Muriel Fox Aronson, vice president, Carl Byoir and Associates, a New York public relations firm, and Robert Riley, editor, *AMA News*. Ways of keeping the auxiliary membership informed will also be featured.

Presiding at the meeting, which formally convenes Monday, June 16, will be Mrs. William G. Thuss, Birmingham, Ala., auxiliary president. During the opening day session, state auxiliary presidents will report on the outstanding state activities of the year.

A feature of the convention will be the presentation of a commendation of Donna Reed for her television portrayal of a doctor's wife. Mrs. Thuss will make the presentation at the Tuesday luncheon honoring national auxiliary past presidents.

Guest speaker at the luncheon will be AMA President George M. Fister, Ogden, Utah. At this time, the auxiliary's annual contribution to the nation's 36 medical schools through the AMA—Education and Research Foundation will be announced. Last year's gift was over $240,000.

Mrs. Stoltz will be installed as president at the concluding business session Wednesday morning. Election and installation of other national officers will be held then. Guest speaker will be AMA President-elect Edward Annis, Miami, Fla.

A post-convention conference for all auxiliary members will be held Thursday, June 20. The 1963-64 programs and chairmen will be presented, and Dr. Ernest B. Howard, AMA assistant executive vice president, will discuss principal actions of the AMA House of Delegates.

The convention, which is held at the same time as the AMA's 112th annual meeting, will formally adjourn at noon Thursday, June 20.

Doctor's Day Observed Throughout the State

Physicians throughout the state were honored on March 30, Doctor's Day.

A project of the Southern Medical Association, Doctor's Day is observed by 16 southern states, the Canal Zone, District of Columbia, and Puerto Rico. In Mississippi, the day was set aside by an official proclamation from Governor Ross R. Barnett.

Doctor's Day was begun in Barrow County, Georgia, in 1933. The date, March 30, commemorates the day Dr. Crawford W. Long, famous Georgia physician, first used ether anesthesia in surgery.

Mississippi members of the Woman's Auxiliary chose different ways to honor their doctor-husbands.

—Biloxi Medical Auxiliary entertained their husbands at a Doctor's Day dinner, presenting each with a red carnation, symbol of Doctor's Day, as a boutonniere.

—Central Medical Auxiliary presented a check to the Jackson Municipal Library for the purchase of new books relating to medicine and donated a historic letter of medical interest to the State Historical Museum. The letter from Lewis Condict of New Jersey was written to Dr. W. Lattimore "at or near Neatchez" May 17, 1817. The object was to introduce a young physician, Dr. Daniel Phoenix, who was starting the practice of medicine in Mississippi. The letter was added to the medical display of the State Historical Museum, which is a permanent project of the Central Auxiliary.

—Columbia Medical Auxiliary honored local physicians with a coffee and presented each with a red carnation, symbol of Doctor's Day. Mayor H. S. Newsom issued an official proclamation in observance of the event.

—Gulfport Medical Auxiliary entertained their husbands with a party. Observance of the day included a proclamation by Mayor R. B. Meadows, Jr.

—Homochitto Valley Medical Auxiliary made a donation to the Loan Guarantee Fund of the American Medical Association Education and Research Foundation in honor of Doctor's Day. The Loan Fund is available to medical students, interns, and residents.

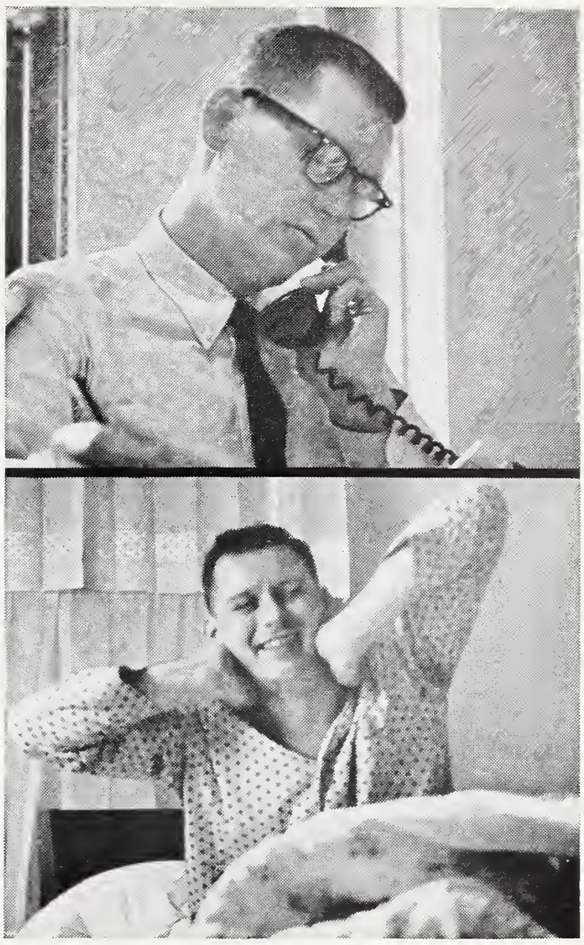
—Lowndes County Woman's Auxiliary honored doctors of Columbus and the county with a dinner party. Instead of presenting each physician with the customary red carnation boutonniere, however, the Auxiliary contributed the amount usually expended to the AMA Loan Fund.

—West Mississippi Medical Auxiliary presented books to the Vicksburg Public Library in recognition of Doctor's Day.



Officials of the Central Medical Auxiliary present Governor Ross Barnett with a historic medical letter for the State Historical Museum. The presentation was made in honor of Doctor's Day on March 30, which was recognized with an official proclamation by Governor Barnett. From left to right are Mrs. Eugene G. Wood, Jr., Doctor's Day Chairman; Mrs. J. Gordon Dees, president of the auxiliary, and Governor Barnett.

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Contraindications:
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Possible Side Actions:
Xerostomia, mydriasis and, occasionally, hesitancy in urination. Theoretically, a curare-like action may occur.

1. Asher, L. M.: The Choice of Anticholinergic Drugs in the Treotment of Functionol Digestive Diseoses, Amer. J. Dig. Dis. 4:260-275 (April) 1959.

Rocky Mountain Conference Set for July 12-13

Dr. Edward R. Annis, president-elect of the American Medical Association, will be one of the principal speakers at the 17th Annual Rocky Mountain Cancer Conference, July 12-13, at the Brown Palace Hotel in Denver, Col.

Speakers on the two-day scientific program include: Dr. James C. Doyle (ob-gyn), Beverly Hills; Dr. Edward A. Gall, director, Department of Pathology, Cincinnati General Hospital and editor in chief of the *American Journal of Pathology;* Dr. Olof H. Pearson, associate professor of laboratory medicine, Western Reserve Medical School; Dr. Henry L. Jaffee, director, Division of Radiation Therapy and Nuclear Medicine, Cedars of Lebanon Hospital; Dr. Howard R. Mahorner (surgery), New Orleans; Dr. Murray M. Copeland, professor of oncology, University of Texas Postgraduate School of Medicine, Houston, will represent the American Cancer Society at the meeting.

The first day of the conference will be devoted to scientific papers presented by the guest speakers. A panel discussion featuring the guest speakers and entitled "Available Methods in the Treatment of Persistent Cancer," will highlight the morning session of the second day. A round-table forum will follow the panel in the afternoon.

Application has been made for AAGP accreditation of the Conference.

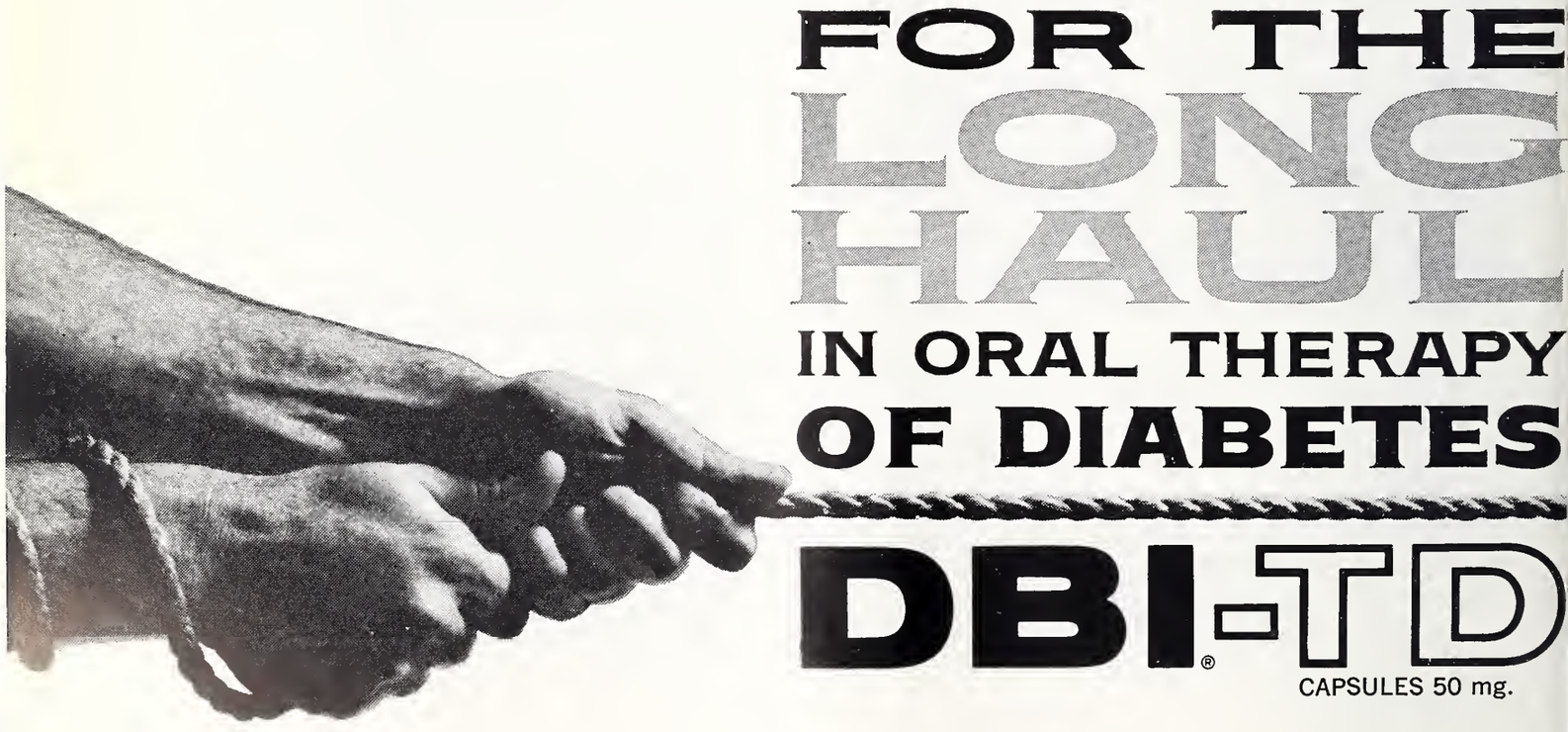
The Rocky Mountain Cancer Conference, held annually in Denver, is co-sponsored by the Colorado Division of the American Cancer Society and the Colorado Medical Society.

Further information may be obtained by writing Rocky Mountain Cancer Conference, 1809 East 18th Avenue, Denver 18, Col.

'Application of Computers' Monograph Is Available

A new volume, "Application of Computers in Cardiovascular Disease," fifth in the American Heart Association's Monograph Series, is now available through local Heart Associations or the AHA national office at $2.50 a copy.

The publication reviews the use of computers in medicine, an area of great promise and of particular interest to research scientists, physicians



concerned with medical records, and hospital laboratories.

Edited by Dr. John H. Moyer, the 150-page volume consists of the proceedings of a symposium held under joint sponsorship of the Heart Association of Southeastern Pennsylvania and the Pennsylvania Department of Health.

Previous volumes in the Monograph Series included symposia on Congestive Heart Failure, Coronary Heart Disease, Angiotensin, and Use of Indicator-Dilution Technics in the Study of the Circulation.

Medical Students Schedule May Meeting

More than 2,000 medical students, interns, and residents will gather at the Sherman House in Chicago, May 2-5, for the 13th annual meeting of the Student American Medical Association.

One of the features of the four-day meeting will be a speech by Dr. Michael DeBakey, noted Houston surgeon, on "The Role of the Physician in Our Changing Society." Another highlight will be the speech, "Faith as a Factor in Psychotherapy," by Dr. Corbett Thigpen, co-author of the novel, "The Three Faces of Eve."

The scientific program of the meeting will also include a symposium on "The Newer Uses of Corticosteroid Therapy," chaired by Dr. Harley E. Cluxton, of Northwestern University School of Medicine, the presentation of award-winning scientific papers by SAMA members; and an exhibit of outstanding medical photographs and illustrations.

For legal buffs, SAMA will stage a moot trial, "The Malpractice Trial of Dr. Keasey Kildare," featuring medical and law students assisted by the legal department of the American Medical Association.

Sessions of the SAMA House of Delegates, policymaking body of the association, will open on May 2 and conclude May 5, with the election of officers for the 1963-64 year.

Other speakers on the program include Dr. Walter Alvarez, M.D., Chicago, Ill., "The Vanishing Art of Diagnosing with the Eyes and Ears"; Dr. Albert Ritt, president of the American Academy of General Practice; Dr. George Stilwell, president of the American Medical Writers' Association, "Medical Writing: Its Perils and Pitfalls"; and Dr. George M. Fister, president of the American Medical Association.

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long term clinical safety . . . No liver or parenchymal organ toxicity has been observed after up to 2½ years of daily use of DBI-TD — nearly 5 years with the DBI tablets.[1,2,9] "The absence of hypoglycemic reactions" with phenformin "has been conspicuous."[5]

long term tolerance . . . DBI-TD is well tolerated with minimal g.i. side effects.[2,6,8] Radding et al.[6] report, "the relative freedom from gastrointestinal side effects was particularly reassuring . . . and in no instance was it necessary to discontinue the drug."

long term convenience . . . Once a day dosage — or at most twice a day — for great majority of diabetics makes DBI-TD simple and convenient therapy. Each dose lowers blood sugar gradually, smoothly, for about 12 to 14 hours.[6]

DBI-TD (brand of Phenformin HCl — N¹-β-phenethylbiguanide HCl) available as 50 mg. timed-disintegration capsules; bottles of 100 and 1000 capsules. Also available as DBI tablets, 25 mg., bottles of 100 and 1000.

Important: Before prescribing DBI-TD, the physician should be thoroughly familiar with directions for use, including indications, dosage, possible side effects, precautions and contraindications. Write for complete literature.

1. Pomeranze, J.: Clinical Med. 8:1155, June 1961. 2. Krall, L. P. and Bradley, R. F.: Geriatrics 17:337, May 1962. 3. DeLawter, D. E. et al.: J.A.M.A. 171:1786, Nov. 28, 1959. 4. Perkin, F. S.: J.A.M.A. 173:36, May 7, 1960. 5. Pearlman, W.: Phenformin Symposium, Houston, Feb. 1959. 6. Radding, R. S. et al.: Metabolism 11:404, April 1962. 7. Gold, A. et al.: Applied Therapeutics 2:137, 1960. 8. Brown, G. D. and Gabert, H.: Applied Therapeutics 4:451, May 1962. 9. Gold, A.: Applied Therapeutics 4:466, May 1962.

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Articles for Publication

Manuscripts should be typewritten, double spaced on one side of the paper. Tables, charts, and tabulations should be submitted on separate sheets but their position in the text should be indicated. Authors are encouraged to limit bibliographies to 10 references, written in conformation to style utilized in scientific publications of the American Medical Association. Articles are accepted for publication on the condition that they have not been previously published and are contributed solely to this JOURNAL.

A thesis summary of 75 to 100 words must accompany each manuscript separately from the text. Figures and drawings are acceptable when prepared with black ink on white paper. Photographs for illustrations should be unmounted, untrimmed, glossy prints and all such material must be identified. No charges are made to authors for illustration engravings not exceeding four column inches per printed page.

Reprints may be obtained at cost from the association. The right is reserved to decline any manuscript for publication. Ordinarily, manuscripts submitted will be acknowledged whether published or not.

Units to Test Diagnostic Skill Available for Medical Meetings

Units that enable from four to fifteen or more physicians simultaneously to test their ability to diagnose heart disease from case histories illustrated by x-rays and electrocardiograms are available on loan from the American Heart Association.

The units, prepared by the AHA Committee on Professional Education, have been designed in four-panel sections to accommodate large medical meetings and two-panel sections suitable for classroom use. Each self-illuminated section measures approximately 4 feet wide, 7 feet, 9 inches high, and 4 inches thick. Each panel illustrates a separate medical case with three x-rays and a set of electrocardiograms. Written case histories accompany the visual material.

Groups wishing to arrange to use the units may write to the AHA Distribution Department, 44 East 23rd St., New York 10, N. Y., for information on schedules and service charges.

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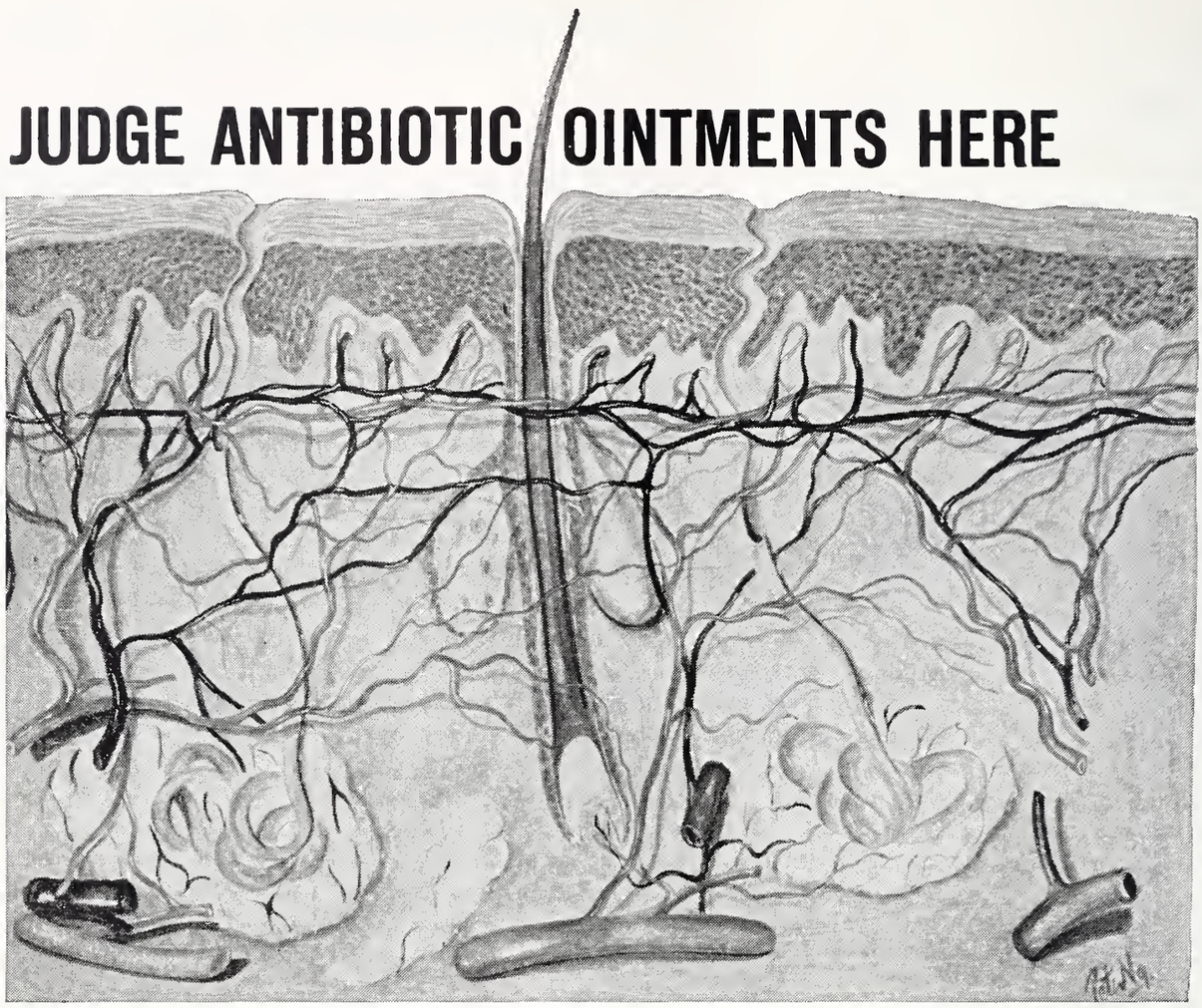
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NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION
JACKSON, MISSISSIPPI

June 1963

Dear Doctor:

Neither friend nor foe of "fedicare" was surprised when President Kennedy's Council on Aging made its report advocating enactment of the King-Anderson bill. The frankly partisan group was chaired by HEW Secretary Celebrezze and included the secretaries of Treasury, Agriculture, Commerce, and Labor along with chiefs of Civil Service, Housing and Home Finance, and Veterans Administration.

> Report demeaned voluntary prepayment, private health insurance and Kerr-Mills as being "of limited value." Created by executive order last year, the group said problems of aged have become close to making them second class citizens.

The largest U.S. city and one of its smallest towns will fluoridate public water supplies. New York's Mayor Robert Wagner announced project which will cost almost $1 million annually. Wagon Mound, N.Mex., population 40 families, will fluoridate its two wells; cost is $90 and U.S. Public Health Service will put up the money.

Get well soon but please don't write, says Insider's Newsletter about Asian flu outbreak in Finland. Incidence subsided dramatically and outbreak ended when postmen went on two week strike. Finnish health officials say flu bugs can be transmitted by letters and sick people, under enforced inactivity, write more.

Accidents are number one enemy of children and working people, causing loss of 84 million work days and 12 million school days annually. In an average year, 45 million sustain injuries serious enough to require medical attention or to cause restriction of activity. South is second safest area with injury rate of 243.2 per 1,000; Northeast had 232.5; North Central, 260.2; and the (wild) West, a whopping 308.5 rate.

Court-decreed prohibition of x-ray use by chiropractors in New York was overturned by enactment of recent Rockefeller-backed licensure law. Empire state cultists, now legalized, are limited, however, in using x-ray for "chiropractic analysis" only on patients over age 18 and may not expose any part of body below top of first lumbar vertebra.

Sincerely,

Rowland B. Kennedy
Executive Secretary

DATELINE - MEDICAL AMERICA

Presbyterian Church Will Rescue Miners' Hospitals

Washington - The financially-troubled hospital system built by the United Mine Workers of America will be purchased by the United Presbyterian Church, USA. The 10 institutions are located in Kentucky, Virginia, and West Virginia and cost about $30 million to build six years ago. Church has agreed to establish a regional hospital authority to arrange sale and transfer and said it is seeking federal funds from Area Redevelopment Administration to complete deal at a fair price.

Pathologist's Testimony Settles Estate Dispute

Baltimore - A suit over who could inherit the joint estate of a childless, intestate couple who died almost simultaneously was decided on the testimony of Dr. Russell Fisher, chief medical examiner for Maryland. Fisher told court that husband survived wife by several seconds, so award was made to deceased husband's sister. Husband suffered heart attack and the wife called an ambulance. Both were apparently dead when it arrived.

New York Sets Criteria For Crankcase Ventilating Systems

Albany - New York's Air Pollution Control Board has established interim criteria for crankcase ventilating systems of 1963 and 1964 model cars. Law enacted last year set June 30, 1963, as deadline after which all new cars must have pollutant-reducing devices. The system, sometimes called blowby controls, return engine fumes for reburning, replacing road draft tubes which discharge crankcase contaminants into air.

UHF Marks First Anniversary

New York - The United Health Foundations celebrated its first year of activity as a national agency devoted to bringing together medical research and health education interests to assist in rational use of local United Givers Fund health dollars. UHF does not compete with specialized voluntary health agencies but it does discourage development of additional fractionalized health agencies in the future. Dr. John B. Youmans is full-time president of the organization.

King-Anderson Enactment Would Pinch State's Pocketbooks

Jackson - Apart from care deterioration, federal controls, and socialization, King-Anderson legislation would step up the Social Security tax bite on those who'd get nothing in benefits. Mississippians would be forced to pay as much as $14 million new taxes in the first year. In 1961, state workers shelled out $58.2 million in Social Security taxes. Passage of King-Anderson would hike the tab to $85.2 million by 1965, according to conservative estimates.

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
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ORIGINAL PAPERS

Invasive Cancer of the Cervix

C. G. SUTHERLAND, M.D.
Jackson, Mississippi

One who peruses the literature of the preceding century in a search for data on cancer of the cervix is likely to be the victim of conflicting emotions when his labor is completed. He will be deeply impressed by the magnificent advance which the profession has made in its knowledge of pathology, the prevention of infection, and improvement in operative technique, and profoundly depressed by the absence of corresponding improvement in the ultimate mortality rate of the disease.

The evolution of various phases of the treatment of cancer of the cervix is developed in a generalized manner. Choice of treatment is discussed, with an attempt made to place the role of surgery and radiation in proper perspective. Completely satisfactory results in the treatment of this disease have not been realized. Until a breakthrough is reached, improvement in results will come primarily from earlier diagnosis with adequate therapy.

THIS STATEMENT was made by Skeel[1] in 1921, in a paper read before the 34th annual meeting of the American Association of Obstetricians, Gynecologists, and Abdominal Surgeons. His paper was entitled "Some Phases in the Evolution of the Diagnosis and Treatment of Cancer of the Cervix." Today, 40 years later, by and large this statement still holds true. In spite of our far greater understanding of the principles of therapeutic radiation and the better techniques of administration, as well as a truly phenomenal extension of the latitude of radical surgery to a point approaching the ultimate in the excision of pelvic viscera, our overall five-year survival rate without evidence of recurrence is still dismally low—in the neighborhood of 45 per cent.

The purpose of this paper is to review briefly the status of the treatment and complications of invasive cancer of the cervix. Our remarks are not concerned with pre-invasive lesions. No effort is made to present an answer to the problem. Indeed, no one has the final answer, and, unfortunately, it is not descernible in the immediate future.

The seriousness of cancer of the cervix was recognized for many years prior to Virchow's establishment of the cellular pathology of cancer. Hundreds of years before, cancerous growths of the human body had been attacked by the knife and actual cautery. The inevitable consequences of this disease encouraged heroic measures even in the pre-anesthetic and pre-antiseptic age. Osiander in 1802 performed cervical amputation, Sauter in 1822 performed vaginal hysterectomy, and Langenbeck in 1825 performed an abdominal hysterectomy in an effort to cure the disease.

The pain and prohibitive mortality rates of hysterectomy prompted much editorializing. In the Medico-Chirurgical Review, 1830, the editor stated: "We consider the extirpation of the uterus, not previously protruded or inverted, one of the most cruel and unfeasible operations that ever was

projected or executed by the head or hand of man." In 1863, Sir James Y. Simpson said that "excision of the uterus is an unthinkable procedure at present."

By the late 19th century, however, the surgical attack was being employed more frequently, particularly by German surgeons, and the vaginal route was preferred due to a lower mortality. In 1902, Schauta put forward his method of a radical vaginal hysterectomy, an approach preferred by certain surgeons even today. At a recent meeting of the Central Association of Obstetricians and Gynecologists, Navratil of Austria reported several hundred cases treated by this method, and his results compared favorably with those obtained by the abdominal route.

In this country, Wertheim first reported his radical abdominal approach in 1907. A more radical version of his operation is the one performed today.

X-RAY THERAPY

With the discovery of x-rays in 1895 by Von Roentgen and the isolation of radium by the Curies in 1902, another modality for the treatment of cancer of the cervix became available. The medical community was quick to begin the application of radiation therapy to this disease, and radiotherapy was begun in New York in 1903 by Margaret Cleaves. By the 1920's, external x-ray plus radium applied to the cervix became the usual method of radiation therapy.

As was to be expected, the new modality was viewed with skepticism at first. Advocates of surgery or radiation were found on either side. Cobb, writing in the *Journal of the American Medical Association* in 1920, stated: "It is absolutely certain that radium and cautery cannot cure cancer of the cervix." By the late 1920's, however, radiation therapy began largely to replace the surgical approach for invasive cancer and remained the treatment of choice for most cases until Meigs[2] in the 1930's began to re-explore the advantages of surgery. This renewed interest on the part of Dr. Meigs was stimulated by his observance of radiation failures which, by the usual criteria, should have been successful. In 1939, prior to the availability of sulfa drugs, his first operation was performed on a patient who had failed to respond to radiation therapy. She died of generalized peritonitis. Two other similar cases were done, fistulae developed, and the idea of surgery was nearly abandoned. However, with the advent of sulfa, surgery was again attempted, this time as the primary treatment. The operation was successful, and the next 99 patients were operated on without a mortality. These successes resulted in the renaissance of the surgical treatment as employed in this country today.

SURGERY RESULTS

Unfortunately, Meigs' results have apparently encouraged surgical attempts that are completely inadequate when compared to the operation which he performs and the results he obtains. Henriksen[3] reviewed the records of 83 patients, all clinical stage I carcinoma of the cervix. In each case, the surgical procedure was listed as a radical hysterectomy and bilateral lymphadenectomy. These procedures were performed in 11 hospitals by 36 different physicians with varying degrees of surgical training, including some whose training was listed as one to two years of rotating internships. In 33 per cent of the cases, no vaginal cuff was identifiable. In some, even the cervix was incompletely removed. According to the pathologist's report, about half of the patients had little more than a simple total hysterectomy. No nodes were identifiable in the tissue submitted in 52 per cent of the cases, although all were listed as having had bilateral lymphadenectomy.

Surgical complications included five vesicovaginal fistulae, one severed ureter, and one surgical death. The salvage rate for four years was some 53 per cent as compared to salvage rates of 70 per cent to 90 per cent obtained in similar cases treated adequately elsewhere.

These figures are not used to attack the surgical approach but rather to point out the results of inadequate therapy, regardless of the modality applied. Obviously, such poor results can also be expected in the utilization of radiation therapy if ill-advised and inadequate radiation is employed.

Invasive carcinoma of the cervix is a major illness. It requires major treatment and, as one would expect, major complications can be expected to occur. This has always been true, and in spite of many advances during the past 40 years it is still true today. Serious surgical complications, particularly hemorrhage, infection, and fistulae formation, remain formidable problems. Radiation sequelae, particularly damage to normal tissue, excessive fibrosis, and sepsis, are problems today as they were in the beginning. It would be incorrect to say that no significant advances have been made in the treatment of this lesion, but it behooves us all to reflect upon the number of failures that still occur.

Since the earliest days of radiation therapy, different writers have proclaimed the virtues of surgery over radiation or vice versa. It is more realistic, however, to consider surgery and radiation not as competitors in the treatment of this lesion, but rather as different modes of therapy, each of which has a proper place. In given cases, one might have distinct advantages over the other. In other cases, one might be equally efficacious to the other, allowing the physician a choice of either. The seriousness of either approach, however, should cause us to select the modality which (a) will work best in our own hands according to our individual training and ability, (b) give the patient at least an equal chance of cure, and (c) give the least chance of serious complications and undesirable side effects.

COMPARISON OF ATTACKS

A review of the literature does not establish the superiority of either attack when viewed in proper perspective. Indeed, it is quite difficult to compare statistics between one series and another as there are a number of factors which may produce variables. These factors include: (1) The number of very early cases included (in a given case one pathologist might call a lesion "in situ" while his confrere might consider it to be early invasive), (2) the difference in the extent of surgery performed by different surgeons, (3) the difficulties and errors associated with accurate staging (witness the fact that 15 to 20 per cent of clinical stage I lesions already have lateral pelvic node involvement), (4) the inherent radio-resistance of some of these tumors, and (5) the adequacy, or lack of it, of the radiation therapy employed.

Much improvement has occurred in the techniques of radiation therapy since it first became available. Probably the most important improvements have been (1) the recognition of the hazards and limitations of such therapy (which began to become obvious early in its development as a result of the effects of over-exposure to both physician and patient), (2) the improved techniques of administration with methods available to more accurately measure actual dosage delivered to various points in the pelvis, and (3) the development of the team concept of cooperation between the radiologist and the pelvic surgeon in their joint effort to individualize the patient regarding the type and extent of treatment that would best be employed.

There are a number of questions which can best be answered by the team approach rather than by the radiologist or pelvic surgeon relying entirely upon his own judgment. These include: (1) whether or not conventional radiation therapy should be employed, (2) whether or not modifications of radiation technique might be necessary, (3) whether or not palliative treatment only is indicated in an effort to be of short term benefit to the patient, with such treatment administered so as to avoid aggravation of discomfiture in a hopeless case, and (4) whether or not radiation therapy should be supplanted by a primary surgical approach.

TECHNIQUE CHANGES

Less important changes in radiation therapy of cervical cancer lie in the development of the super-voltage x-ray and the use of radioactive isotopes such as cobalt 60. It is true that a greater depth dose of external radiation can be delivered by these means, but the amount of radiation that can be tolerated by the normal pelvic structures, particularly the GI and GU tract, is still limited and cannot safely be exceeded without serious sequelae. Hence the superiority of these techniques over the more conventional 220 KV machine plus intracavitary radium has not been demonstrated in the treatment of cancer of the cervix when overall survival rates are compared.

Radioactive colloidal gold injected into the parametria in an attempt to sterilize the lateral pelvic nodes has not met with significant success. The use of radium or cobalt needles inserted into the cervix and parametrium, transvaginal x-ray, and rotational techniques are variations in technique having superior value only when standard techniques cannot be employed.

The use of radioactive sources placed along the lateral pelvic walls at the time of laparotomy (to be removed later after a calculated dosage has been delivered) has not been of real value.

A number of potentiating agents (such as oxygen, vitamin K, hematoporphyrin, alpha tocopherol, and testosterone) have been used in an effort to render radiation therapy more effective. Most of these are either still in an investigative stage or have failed to produce clinically significant improvement, however.

Efforts to identify those patients in whom the tumors may be expected to be radioresistant are being made. The cytological studies of vaginal cells during treatment, as carried out by Ruth Graham, as well as the response of buccal mucosa cells exposed to radiation, represents efforts towards cytologic prognosis. To date these techniques cannot accurately and consistently allow us to pre-select those cancers which will not re-

spond to radiation therapy, and hence would best be treated by surgery.

SURGERY'S ROLE

There can be no doubt that surgery has a legitimate role in the treatment of cervical cancer. However, it is probably safe to say that the consensus among most physicians directly concerned with the treatment of this disease is that surgery should be employed only in selected cases and that adequate radiation therapy remains the treatment of choice in most cases.

Primary surgery, in the form of radical abdominal hysterectomy and lymphadenectomy, has not been shown to produce a higher salvage rate than would adequate radiation therapy in a comparable group of patients. There is no doubt that many stage I and II cancers can be treated surgically with a five year survival rate without evidence of disease that compares favorably with radiation results in similar cases. On the other hand the operative risk of such major surgery is certainly greater than that associated with external x-ray and application of radium to the cervix. In addition, later complications of surgery, particularly a 7 to 10 per cent incidence of ureteral fistulae, is definitely higher than that experienced following radiation therapy in a similar group of patients.

GREATEST USEFULNESS

Surgery probably finds its greatest field of usefulness in patients who cannot be treated adequately with radiation and in those who do not respond to radiation. Anatomical distortions may preclude the use of intracavitary radiation. Mental patients at times, through lack of their ability to cooperate, might best be treated by surgery as a primary attack. Some patients with a surgically acceptable lesion might best be treated this way for psychological reasons. Primary surgery might be chosen in the young patient with an early lesion who is a good operative risk and especially is this so if it is desirable to maintain ovarian function. And finally surgery might be the only recourse in patients who show residual disease after radiation therapy.

Lymphadenectomy is generally conceded to be an important part of the primary surgical approach. Patients are living without evidence of disease who were found to have lateral node involvement at the time of surgery. However, the most important part of the radical hysterectomy undoubtedly lies with the adequate removal of the parametrial and paravaginal tissue. Inadequate removal in these areas will greatly reduce the patient's chance of cure.

THERAPY COMBINATIONS

Various combinations of radiation therapy plus surgery have been employed. Full radiation followed by radical hysterectomy and lymphadenectomy, full radiation followed by lymphadenectomy alone, full radiation followed by simple hysterectomy, and radium to the cervix followed by radical hysterectomy have all been employed as a primary attack, but none has been shown to give superior results. To the contrary, it can be anticipated that full radiation followed by radical surgical excision will definitely increase serious complications. Palumbo *et al.*[4] found a 30 per cent incidence of serious urological complications (vesicovaginal fistulae, ureterovaginal fistulae, and ureteral stricture) in patients treated by radiation plus radical surgery. It would seem that surgery should follow radiation therapy only when clear-cut indications are present and not with the expectation of routinely increasing the survival rate.

Ultraradical pelvic surgery was established by Brunschwig in 1947. He orginally devised the operation as a palliative surgical procedure to prolong life and add a measure of comfort. However, five-year survivals without evidence of disease encouraged him and others to employ partial and total pelvic exenteration in an attempt to cure. The operation should be reserved for highly selected patients in whom radiation and/or radical hysterectomy have failed. The magnitude of the surgery, the problems associated with permanent divergence of the fecal and urinary stream, the operative mortality of 15 to 20 per cent, the discouraging number of patients who are not helped palliatively or who still have cancer after surgery are cause for reflection not only on the part of the patient involved, but also the physician who might be planning to perform the surgery or to recommend that it be performed. In addition to pathological and physiological considerations, a psychological appraisal is important in this area. In 1960, Brunschwig[5] reported 498 pelvic exenteration procedures. His operative mortality was 17 per cent, 27 per cent survived over two years, and 17 per cent had survived for 5 to 12 years. One has to conclude that pelvic exenteration has a place, albeit a small one.

For those who thought that total pelvic exenteration represented the ultimate in radical surgery for pelvic malignancy, let it be noted that Ken-

nedy et al.[6] performed a hemicorporectomy for rectal cancer with fistulae formation in a 74-year-old male. The body was completely transected at the lumbar level and the patient lived 11 days postoperatively. Surely this represents the ultimate in the surgical attack on pelvic cancer.

In conclusion, we might say that invasive cervical cancer continues to present a grave challenge. It is a major illness requiring major therapy which is associated with a significant number of major complications. In spite of radiation, surgery, and various combinations of these two, the over-all cure rate is discouraging. Chemotherapy is not promising in this field. Probably it is safe to say that improvements and modifications of existing modalities of treatment cannot realistically be expected to alter results for the better. In the light of our present day knowledge, the best way we have to improve results lies in earlier diagnosis with adequate treatment. ★★★

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SMOKING OUT THE TRUTH

Bulgarians who feel that they smoke too much may now avail themselves of the latest communist largess, Atrotabak cigarettes. The state says that the smokes "have a pleasant flavor, are quite harmless and help in curing bronchial asthma, duodenal ulcer, Buerger's disease, hypertension, and other conditions." While the cigarettes contain no nicotine, they do have among their ingredients atropine, hyoscyamine, and scopolamine. Which leaves little room for wonder that any close-mouthed communist in Bulgaria might be hesitant to change brands.

—*Wall Street Journal*

The Solitary Thyroid Nodule In the Gulf States

W. HOWARD KISNER, M.D.
Natchez, Mississippi

A review of the literature indicates that the pattern of goiter in the South differs from that of other parts of the United States. Some writers have noted that in nonendemic goiter areas solitary nodules of the thyroid gland are more prevalent than the multinodular type of goiter. The author presents his series which supports this observation and discusses diagnosis and treatment of the solitary thyroid nodule.

THE PATTERN OF GOITER in the South appears to be different from that in other parts of the United States. Lahey[1] has pointed out that in nonendemic goiter areas solitary nodules of the thyroid gland are more prevalent than the multinodular type of goiter. This has been the author's experience in the South.

INCIDENCE

In the author's series of thyroid operations, 39 per cent of the total number of goiters were solitary nodules, 28 per cent were multinodular goiters, and 8 per cent were struma lymphomatosum. This pattern of thyroid disease is quite different from that of the Great Lakes region where multinodular goiter is far more common. Crile[2] has stated that from a pathologic standpoint nearly all women over 50 years of age in the Great Lakes area have nodular goiters and from the clinical standpoint nearly 10 per cent of them have palpable nodules in the gland.

The total number of solitary nodules of the thyroid gland operated on in this series was 61. The pathology of the 61 nodules was as follows: 33 colloid adenomas, 9 fetal or embryonal adenomas, 3 adenomatous nodules, 10 follicular adenomas, and 4 papillary adenocarcinomas. In two cases the pathology report was missing. Three of these cases were toxic and required treatment with one of the antithyroid drugs before surgery. The average age of this group of patients was 37 years. All in the group were females with the exception of one case. Two of the patients were Negroes and the remainder white. The patients were residents of either Mississippi or Louisiana, and the majority were born in this area and had spent the greater part of their lives in the lower Mississippi valley. The duration of the nodule varied from a few days to several years in this group of cases. Many of these solitary nodules were found on routine examination and the patient was unaware of the nodule's existence.

From the Natchez Medical Clinic.

RELATION TO CARCINOMA

The percentage of malignancy in the solitary thyroid nodule varies considerably according to various authors. Cole[3] reported 24 per cent malignancy, Lahey[4] 10 per cent, and Crile[5] 24½ per cent. In the author's 61 cases of solitary nodules there was a 6 per cent incidence of malignancy. The incidence of malignancy in the solitary adenoma is far greater than in the multinodular goiter as reported by numerous authors. Whether carcinoma originates in a pre-existing solitary adenoma as advocated by Graham[6] and Lahey[1] or the lesion is a cancer from the beginning as advocated by Crile[5] is still a debatable point. The important question for the clinical physician is whether all solitary adenomas or nodules should be removed, and if not, which nodules should be removed.

Certainly the age of the patient enters into this problem. In the young, especially those under 20, the possibility of malignancy in a solitary nodule is much greater than in the older age group. Win-

ship and Rosvoll[7] collected 315 published cases and 247 unpublished cases of childhood thyroid carcinoma. The incidence of carcinoma in a nodule of the thyroid gland in children has been reported by these authors to vary from 20 to 52 per cent. Many investigators have found a high percentage of metastases from thyroid carcinoma at the time of the first examination. Nodules in the lateral region of the neck in children are often the first sign of thyroid carcinoma.

The relationship of previous irradiation, especially x-ray treatment of the thymus during infancy, to carcinoma of the thyroid gland in children has been well documented by numerous authors. Out of this large series collected by Winship and Rosvoll,[7] attempts were made to obtain a history of irradiation in 277 of the patients. Of this group, 80 per cent had a history of previous irradiation therapy.

Crile[2] has stated that in patients over 40 years of age tumors that appear to be solitary nodules are more likely to be dominate involutionary nodules in a multinodular goiter. He also believes that removal of all nodules in the thyroid glands of patients over 60 years of age is scarcely worthwhile.

DIAGNOSIS AND TREATMENT

The diagnosis of a solitary nodule of the thyroid gland is relatively easy. As previously mentioned, many of our patients were unaware of a nodule in the thyroid gland, the diagnosis being established during a routine physical examination. The question of treatment of the solitary nodule should be answered only after a thorough thyroid work-up. If the nodule is toxic the answer to treatment is relatively simple. One of the antithyroid drugs is utilized to bring the patient to a euthyroid state and removal of the toxic nodule is then carried out.

The toxic nodule in the pregnant patient may pose a real diagnostic problem and keen clinical judgment is necessary to evaluate these patients. The protein bound iodine and the basal metabolic rate are unreliable in pregnancy, and radioactive iodine for study should not be used in these patients. A trial of one of the antithyroid drugs in the pregnant patient for diagnostic purposes may be warranted. A word of caution should be noted about the soft nontoxic solitary nodule in the pregnant patient. It is the author's experience that such lesions in the presence of pregnancy are not infrequent and, often times, will disappear completely following termination of the pregnancy. A firm solitary nodule in the pregnant case should be removed surgically.

Most authors will agree that the toxic solitary nodule and the nontoxic nodule in the young should be removed, but there is a wide difference of opinion concerning treatment of the solitary nontoxic nodule of the thyroid in adults. Astwood *et al.*[8] believe a trial of desiccated thyroid should be resorted to in the presence of a solitary nodule. These authors state that thyroid nodules and simple goiter were reduced in size or disappeared in about two-thirds of their cases. A dosage of 180 mg. of thyroid U.S.P. was given daily over a period of six months to two years. Others are in accord with Astwood[8] and co-workers. Crile[2] believes that all discreet, firm solitary nodules in middle-aged patients should be removed. The author in a small series of cases treated with desiccated thyroid has had little success in either reducing the size of the nodule or causing its disappearance.

In order to determine which thyroid nodule should be removed, the use of the scintogram has been advocated. Using scintillation scanning, the external detection of relative degrees of radioiodine concentration has resulted in thyroid nodules being classified as hyperfunctional, hypofunctional, functional, or nonfunctional. Meadows[9] in 103 patients, each with a single thyroid nodule, with scintiscanning and radioiodine found 24 nonfunctional nodules. The incidence of carcinoma was highest in this group, being 58 per cent. The incidence of carcinoma was lowest in the hypofunctional group. In this study there was one hyperfunctional nodule that contained a carcinoma. Chapman[10] has pointed out the disturbing feature of the supposed single nodule is the uncertainty of its histologic structure. The assumption that hot nodules as outlined by the scintiscan never harbor cancer has been disproved by Meadows'[9] study.

It is the author's opinion that solitary nodules should be removed provided the physical condition of the patient will permit surgery. The difficulty of determining the histologic structure of a thyroid nodule by palpation is fraught with uncertainty and danger. Long-drawn-out therapy with desiccated thyroid over a period of six months to two years as advocated by Astwood[8] is time-consuming and, in the author's experience, is uncertain in results. The removal of a solitary nodule is a simple operation without complications. The period of hospitalization is brief and the convalescent time is short. In view of the simplicity of the removal of a solitary nodule the lengthy follow-up of a case with regular periods of observation either with or without desiccated thyroid does not seem to be reasonable.

SUMMARY

It is generally agreed by most authors that the solitary nodule in the young should be removed. This accord by most authors extends to the toxic solitary nodule of the thyroid especially in the pregnant woman. Wide divergence of what to do about the nontoxic solitary nodule in the adult is noted by reviewing the literature. Treatment with desiccated thyroid has been recommended. Removal of the nonfunctioning nodule as shown by scintiscanning after I^{131} has been advocated with nontoxic hypofunctional and functional nodules reserved for medical treatment.

The author believes all solitary thyroid nodules should be removed with the exception of the soft nodule seen at times in the pregnant patient. Only in the aged or poor risk patient should surgery be deferred. ★★★

724 North Pearl St.

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PURGING THE PROBLEM

The nation's stockpile of strategic materials has been characterized as being just short of scandalous but for Sen. Stephen M. Young (D., Ohio), there are two items—one medicinal—which might be used to cancel out each other. The senator is perturbed over a stockpile of $55 million worth of castor oil and $38 million in feathers. His solution: "What to do with this fluffy stuff is even beyond the intelligence of New Frontiersmen. Why would it not be an excellent idea if we made good use of this stockpiled castor oil by administering it to those responsible for the huge amount of feathers?"

Gallstone Ileus

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Intestinal obstruction due to gallstone is a relatively rare condition, but must be suspected in certain cases of intestinal obstruction in which the etiology is in doubt. The author reports two cases and discusses incidence, pathogenesis, diagnosis, treatment, and mortality rate.

ALTHOUGH INTESTINAL obstruction due to gallstone is a relatively rare condition, the authors treated two such cases during a 16 months' period of practice. These cases are reported, and the literature reviewed, as a means of stressing to the general practitioner that this condition does actually exist, that it is lethal if mismanaged, and that it must be suspected in certain cases of intestinal obstruction in which the etiology is in doubt.

CASE NUMBER I

Mrs. L. L., aged 65, white female, housewife, was admitted to Beacham Memorial Hospital on Sept. 25, 1959, with a history of recurrent, intermittent, crampy upper abdominal pain for the previous eight days. There had been some vomiting with each attack, but no bowel movement for two days. During the 24 hours prior to admission, the pain had been more severe and generalized. She had vomited almost continuously and had noticed abdominal distention. She gave a history of gallbladder trouble manifested by fat intolerance. She had arteriosclerotic heart disease with failure but was well compensated on digitalis therapy. She also had moderately advanced cerebral arteriosclerosis and senility.

Physical examination revealed mild dehydration, temperature 99.4, pulse rate 120, blood pressure 130/70. The abdomen was markedly distended and tympanitic; bowel sounds were present with definite high-pitched rushes of peristalsis. There was mild, generalized tenderness over the entire abdomen, but no specific area of tenderness was elicited and rebound tenderness was absent.

Flat and up-right x-rays of the abdomen revealed stepladder distention of small bowel with definite fluid levels present. White blood count was 12,400 with a moderate shift to the left. Nasogastric suction was instituted, and after proper preparation with intravenous therapy, the patient was operated on the evening of the day of admission. Preoperative diagnosis was mechanical intestinal obstruction of unknown etiology.

At surgery a rocky, hard mass was found completely obstructing the lower ileum, about three feet above the ileocecal valve. There was marked distention above the site of the obstruction. A longitudinal incision was made over the hard mass, and a gallstone about 3 cm. in diameter was removed. There was inadvertent spillage of some material from the incompletely decompressed bowel. No attempt to explore the gallbladder region was made. Convalescence was complicated by infection, presumably from the spillage; however, the patient gradually improved. Her bowel function returned, and she was discharged on the 21st hospital day. After approximately two and a half years she has had no recurrence of digestive symptoms.

CASE NUMBER II

Mr. W. H. S., aged 82, white male, was admitted to the hospital on Jan. 1, 1961, with complaint of moderately severe epigastric and right upper quadrant pain for the previous 36 hours. There had been no vomiting. The pain was steady and aching in character.

His past history revealed he had been treated with radiation for carcinoma of the tongue five years previously without evidence of recurrence. He also had had a transurethral prostatic resection with diagnosis of carcinoma of the prostate and

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was taking estrogens. He gave a history of indigestion and bloating after eating and had been told he had gallbladder trouble. No x-rays had been made.

Physical examination revealed an acutely ill elderly male in obvious pain; there was definite tenderness and rigidity in the right upper quadrant. There was no abdominal distention. Bowel sounds, although decreased in frequency, were definitely present. White blood count was 17,200; urinalysis showed a one plus albumin and a few red blood cells; no bile was present. A flat plate of the abdomen showed a minimal distention of both small bowel and colon. Two large laminated densities were noted in the area of the gallbladder.

He was admitted with a diagnosis of acute cholecystitis and was placed on conservative therapy. Forty-eight hours after admission, the picture had changed markedly. Although there had been relief of the severe, aching right upper quadrant pain, he complained of intermittent, colicky, generalized abdominal discomfort. There were moderate distention and mild generalized tenderness of the abdomen. Bowel sounds were infrequent and high pitched. X-rays of the abdomen showed a moderate amount of gas in the small bowel, and a review of his earlier films showed, in addition to the two stones in the area of the gallbladder, what was interpreted as probably another stone in the small intestine. A Levin tube was passed and nasogastric suction instituted. On Jan. 3, 1961 (the third hospital day), he had developed a full blown picture of intestinal obstruction. X-rays of the abdomen showed multiple loops of small bowel. It was felt that the patient had a mechanical obstruction probably due to a gallstone.

He was operated on the same day, and a hard mass was found obstructing the area of the lower ileum, from which a faceted gallstone the size of a walnut was removed. Further search of the entire bowel failed to reveal any other stones. The area of the fistula was palpated and found to be a matted mass of dense adhesions and was left alone. The postoperative course was uneventful, and the patient was discharged on the 14th hospital day. A follow up x-ray examination done recently shows the two densities still in the gallbladder area.

INCIDENCE

Gallstone ileus is far from being a medical curiosity. Today the generally accepted incidence is about 1 to 2 per cent of all cases of mechanical obstruction. In a recent review of 1,035 such cases at Massachusetts General Hospital during the period from 1947-1955, Dr. Claude Welch[14] reports an incidence of 0.8 per cent for obturator or gallstone ileus, a frequency of occurrence in the same series as often as mesenteric thrombosis, half as often as volvulus, and one third as often as intussusception. When we further realize that the sex incidence is 5:1 in favor of females and that in 70 per cent of cases the patient is past 60, we find that we are left, statistically at least, with a concentrated group of elderly females as prime suspects.

Although it has been stated that this disease is on the wane because modern diagnostic and therapeutic methods are detecting and removing gallstones before this possible end result occurs, it seems logical to suppose that the same modern methods are allowing more individuals to reach the senior citizen category, that some of these older people will succeed in wiggling through our early warning system of cholecystograms, keep their gallstones long enough for them to erode into and block their respective guts, and present physicians with a ubiquitous diagnostic problem.

PATHOGENESIS

For gallstone ileus to occur, naturally the patient must first develop gallstones—large gallstones which must be about 2.5 cm. in diameter to cause obstruction. Those smaller than this critical size simply pass on through the intestinal tract into the stool. It has been postulated that in some cases there is enough dilatation of the common duct for the stone to pass through it and the ampulla directly into the duodenum. However, by far the large majority of these cases result from chronic infection, chronic inflammatory reaction, slow erosion of a stone through the adjacent gallbladder and intestinal walls with simultaneous production of fibrosis around the juncture to form an internal biliary fistula—or more correctly, in this instance, a cholecysto-enteric fistula. The fistula may connect the gallbladder with the stomach, duodenum, jejunum, ileum, or colon. The duodenum is the usual partner in crime simply because of its anatomical proximity. Once the stone is in the intestinal tract and begins to traverse its length, it may be temporarily or permanently arrested at any narrow site. Finally, when it becomes irrevocably lodged, complete obstruction ensues. By far the most common site of obstruction is in the distal ileum. Next common are the duodenum and jejunum, the ileocecal valve, and the sigmoid colon.

DIAGNOSIS

The theory of pathogenesis can be well related to the various clinical pictures. The process of erosion and fistula formation may mimic, or ac-

tually be, acute or subacute cholecystitis and may be followed by obstruction later as is demonstrated in Case Number II in which the stone probably passed from the gallbladder into the intestine after the patient was admitted to the hospital. However, most patients give no such history of an acute episode. Once it reaches the intestine, the stone may lie quiescent for varying periods of time before it causes trouble. There is one case on record of removal of a gallstone which was obstructing the ileum two years after the patient had had a cholecystectomy. The stone's milk train type of meandering down the gut with temporary halts at all narrow points along the way produces the most constant clinical symptoms, which are the recurrent, intermittent bouts of nausea, vomiting, abdominal cramps, and distention that are the result of incomplete obstruction. This picture lasts for an indefinite period before obstruction becomes complete and should be the tip off to the diagnostician to strongly consider this possibility. In only about 50 per cent of the cases is a good history of previous biliary tract disease elicited.

Physical examination in this early stage is usually not startling, and there are no signs of acute systemic illness. The temperature is usually normal. The laboratory is not much help; the leukocyte count is not remarkable unless the process has progressed to gangrene at the level in which the stone is impacted, and even then may tend to confuse the issue. It has been correctly stated that x-ray examination is by far the most important diagnostic aid in intestinal obstruction in general. This dictum is even more apropos when applied to gallstone ileus. In their classic article, Rigler[15] and his associates in 1941 summarized the x-ray findings which are:

1. The presence of air or contrast medium in the biliary tree. This finding is for practical purposes pathognomonic of a biliary fistula.
2. The visualization of a gallstone in the small intestine.
3. Any change of the position of a stone that has been previously observed on x-ray examination.
4. X-ray evidence of either partial or complete intestinal obstruction.

In a recent excellent article on internal biliary fistulae, Caljone, Izenstark, and Nice,[2] from the Department of Radiology at Charity Hospital in New Orleans, state that if all features of the positive diagnosis, which are mechanical bowel obstruction, biliary air, and the shadow of a stone somewhere in the abdomen are not present, barium meal or enema may demonstrate a communication between the biliary system and the intestinal tract.

MORTALITY RATE

Until the past decade the mortality rate has been appallingly high. McLaughlin and Raines, in a comprehensive study of 502 cases prior to 1940, found an overall mortality rate of 52 per cent. In a recent review published in 1961, Kirkland and Croce[9] report statistics on 131 cases in which the mortality rate was 25.9 per cent, still a high figure when compared with the mortality rate in other types of mechanical obstruction. As in all types of obstruction, the relationship between early diagnosis and operation and higher survival rates is marked.

THERAPY

Once the diagnosis is made, the treatment is no different from that of any mechanical obstruction. The condition is surgically relieved without undue procrastination as soon as the patient can be adequately prepared. After the obstructing stone is located, if possible it should be pushed a short distance proximally so that the enterotomy incision can be made into normal bowel wall. A simple longitudinal incision in the antimesenteric portion of the bowel is made, the stone is removed, and the enterotomy is closed in layers. If there is any degree of distention and dilatation above the site of obstruction, it is a necessary precaution to apply rubber shod clamps before the bowel is opened so that spillage of intestinal contents can be avoided. Of course, if the segment of bowel is necrotic, it must be resected.

The gallstones should be examined carefully for the presence of facets which, if present, suggest the possibility of multiple stones, and demand further exploration to rule them out. Cases have been reported in which apparent successful removal of a stone was done, and the patient eventually expired from obstruction due to other stones in the bowel which were overlooked at the time of surgery. It should also be mentioned and strongly stressed that all authorities are in agreement that the site of the fistula should be strictly left alone at the time of surgery for the obstruction. Exploration of a dense area of possible acute and certainly chronic adhesions and inflammation would constitute a major operation on a healthy person and should not be added to the insult of intestinal obstructions in elderly individuals.

SUMMARY

Two cases of gallstone ileus occurring within a 15 month span in a small hospital have been reported. Salient factors in the incidence and patho-

genesis must be remembered and correlated with the clinical picture and appropriate x-ray studies if the correct diagnosis is to be made often enough and early enough for proper therapy to be instituted. Once the diagnosis is suspected, the vital importance of properly made and correctly interpreted x-ray studies cannot be overemphasized. It must be stressed that it is only through a high index of suspicion, especially in elderly females, that we can make the diagnosis of gallstone ileus and hope to achieve satisfactory results. ★★★

Beacham Memorial Hospital

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HOPELESS HOSPITALIZATION

The city fathers of Cedar City, Utah, have a real medical public relations problem, now that their new hospital is nearing completion. It is sited on Journey's End Street.

Clinicopathological Conference XLI

Conducted by the Department of Pathology
University of Mississippi School of Medicine
Jackson, Mississippi

The patient in CPC XLI, a 53-year-old white male, was admitted to the University Hospital three times between Feb. 18, 1961, the date he first became ill, and Aug. 21, 1961, the date of his death. During these six months, his illness may be divided into four distinct parts: (1) a period dominated by arthritis, (2) a period when attention was focused heavily on the lung, (3) an episode of bleeding from the nose which seriously exsanguinated him, and (4) a final period dominated by increasing chest signs and signs of liver impairment and renal insufficiency.

Discussers are Drs. J. R. Snavely, Robert D. Sloan, John D. Perrine, Myra D. Tyler, and Frederic C. McDuffie. Dr. Joel G. Brunson gives the autopsy report.

THIS PATIENT, a 53-year-old white male, was admitted to the University Hospital on June 23, 1961, because of chest pain. This was his third admission.

The first admission was on Feb. 18, 1961, for two days because of indigestion, nausea, and vomiting after eating onions to which he had a known intolerance. The illness was not remarkable otherwise. Review of systems revealed that about Dec. 1, 1960, he began to have intermittent migratory pain in knees, wrists, elbows, ankles, and metacarpophalangeal joints. His fingers had been puffy and his knees had been red and swollen. He was treated with aspirin and heat, but failed to respond; therefore, he was started on low dosages of steroids to which he responded well. He gave a history of smoking one pack of cigarettes a day for many years.

On physical examination the patient's blood pressure was 110/70, pulse 88 and regular, chest clear to auscultation and percussion, and heart normal. There was no significant lymphadenopathy, and the abdomen was not remarkable. There was a hint of early clubbing. No cyanosis was present, but there was questionable thickening of the PIP joints. The right elbow had minimal swelling.

The laboratory report showed a hematocrit of 42 per cent; the white blood count was 13,400 with 10 per cent monocytes, 9 per cent lymphocytes, 71 per cent segmented neutrophils, and 10 per cent bands. On urinalysis there was a pH of 6.0; specific gravity, 1.015; protein and glucose negative; no red blood cells, and 0-2 white blood cells. The VDRL was nonreactive. The chest x-ray showed the bronchovascular markings to be slightly prominent with some prominence of the left hilar vascular trunk. The heart and lungs were within normal limits.

The patient's hospital course was uneventful. He was treated with intravenous fluids, antispasmodics, and analgesics. He improved and was discharged on Feb. 20, 1961. The final diagnosis was rheumatoid arthritis and gastroenteritis due to unknown causes, probably food intolerance.

Following discharge, his steroids were discontinued. He was maintained on aspirin and did well although he continued to have mild migratory polyarthritis. About May 1, 1961, he noted right parasternal pain which was intermittent, sharp, occasionally radiating to the mid-scapular area, and made worse by deep inspiration or coughing. About the same time he developed a deep, dry cough, increased dyspnea on exertion, and a low grade fever. He denied chills, night sweats, weight loss, or hemoptysis.

He was readmitted on June 10, 1961, for evaluation of the chest pain. Physical examination of the chest revealed coarse rales on inspiration at the bases bilaterally and point tenderness over the fifth costochondral junction on the right with no

localized swelling or redness. There was a regular heart rhythm with no murmurs, rubs, or gallops. The liver was down two fingerbreadths on inspiration and slightly tender; the spleen was not felt. Examination of the extremities revealed no gross deformities, but tenderness was present in the wrist and fingertips and there was erythema over the dorsum of the great toe. Questionable clubbing was again observed, and one examiner noted considerable vasomotor changes in the fingers. Physical findings were otherwise unchanged.

On laboratory examination the hematocrit was 43 per cent; platelet count 295,000; white blood count 13,000 with 15 per cent monocytes; 17 per cent lymphocytes, 2 per cent eosinophils, 50 per cent segmented neutrophils, 15 per cent bands, and 1 metamyelocyte. ESR was 28 mm. per hour; urinalysis, within normal limits; total serum protein, 7.2 gm. per cent; albumin, 3.4 gm. per cent; globulin, 3.8 gm. per cent; uric acid, 3.9 mg. per cent. Latex agglutination was negative. The sputum was negative for fungi and acid fast organisms.

The chest x-ray revealed a diffuse, nonspecific, parenchymal abnormality which in retrospect probably was present in February 1961. The transverse diameter of the heart was at the upper limits of normal. The electrocardiogram was within normal limits. A scalene node biopsy showed no pathologic changes and bacterologic studies were negative. Blood gas studies showed peripheral oxygen saturation decreased after exercise, and 100 per cent saturation was not achieved after breathing 100 per cent oxygen for eight minutes. Pulmonary function studies did not suggest obstructive or restrictive ventilatory insufficiency. Histoplasmin and intermediate PPD were positive.

His hospital course was uneventful except for the chest pain. He remained afebrile and was treated symptomatically with analgesics, antispasmodics, and bronchodilators, and his condition improved. Because of the progressive nature of the pulmonary symptoms and radiologic changes, he was started on prednisolone 10 mg. t.i.d. and discharged to return in the near future for bronchoscopy and lung biopsy.

The patient's final admission was on June 23, 1961, three days after discharge. The chest pain had persisted and was relieved only by narcotics. The physical examination was essentially unchanged. Chest x-ray revealed a diffuse mottling throughout both lung fields appearing more extensive than that seen June 10. The hilar regions were again at the upper limits of normal. The pattern was nonspecific.

The hematocrit was 36 per cent, the white blood count, 27,650 with 3 per cent monocytes, 10 per cent lymphocytes, 86 per cent segmented neutrophils, and 1 band. The urine was orange in color with a specific gravity of 1.018, protein and glucose negative, white blood cells—occasional, red bleed cells 1/hpf. Serum electrophoresis drawn on this admission showed albumin 2.2 gm. per cent with alpha-1-globulin 0.5, alpha-2-globulin 1.0, beta globulin 0.8, gamma globulin 2.0. X-rays of the legs and hands revealed only changes of degenerative arthritis, and the EKG was normal.

On June 24, 1961, he was started on INH 200 mg. t.i.d. and streptomycin 1 gm. b.i.d. That same day he had a bronchoscopy, which was normal, and a left thoracotomy and lung biopsy. The microscopic diagnosis of the lung biopsy was chronic, nonspecific pneumonitis with extensive pulmonary fibrosis and bronchiolar metaplasia of unknown etiology. The cytology, AFB, and fungus studies on the bronchial washings and lung biopsy were negative. Prednisolone was increased to 15 mg. q.i.d., and he was empirically started on tetracycline and penicillin.

On July 3 he had a sudden onset of severe pain throughout the thorax located primarily in the substernal area and associated with cyanosis and tachycardia. His blood pressure was 136/84, pulse 88, respiration 32 and deep. There was no pain associated with respiration, but a pleural rub was heard in the left chest. The EKG was unchanged, and a chest x-ray revealed no pneumothorax. An SGOT was normal.

On July 5, 1961, it was thought that digitalis might help, and he was digitalized. He continued to have episodes of severe chest pain, shortness of breath, and cyanosis requiring oxygen and large doses of narcotics for relief. An x-ray on July 15 showed a pleural effusion on the left, but the parenchymal markings were not measurably increased and the heart size was unchanged. Electrolytes were normal, and the hematocrit was 43 per cent.

By July 27 it was felt he had shown slight but progressive improvement. This was attributed to prednisolone which had been increased gradually to 100 mg. per day. INH and streptomycin were discontinued. He was started on methandrostenolone, ulcer diet, vitamins, and diuretics, and an attempt to mobilize him was started.

On Aug. 4, 1961 he had an episode of bleeding from the right nostril, which was treated with anterior packs, epinephrine, and topical throm-

bin. However, he continued to bleed and became worse. The hematocrit at this time was 28 per cent, one stage prothrombin showed 50 per cent activity, and the platelet count was 106,000. Factor X deficiency was noted. Whole blood was started, his prednisolone was decreased to 20 mg. every 6 hours, and posterior nasal packs were inserted.

On Aug. 6 following a blood transfusion he had a chill, his temperature spiked to 100.4° and two hours later it was 103°. The urinalysis showed negative results for hemoglobin and bilirubin. On Aug. 7 after nine units of blood, his hematocrit was still 24 per cent. The patient was becoming disoriented at times and continued to ooze blood into the nasopharynx.

On Aug. 8 the clotting time was 11 minutes; prothrombin, 100 per cent activity; oil clot retraction, 14 per cent; prothrombin consumption, 19 seconds per hour; platelets, 100,000; chloride, 88 mEq/L; CO_2, 27 mEq/L; potassium, 3.2 mEq/L; sodium, 130 mEq/L; creatinine, 1.4 mg. per cent. His stools had become dark and tarry and 4+ for blood.

On Aug. 11, after 17 units of blood and continued oozing, the right external carotid artery was ligated. The bleeding ceased, and his stools became lighter in color. On Aug. 16 it was realized that he had become jaundiced. The total bilirubin was 4.9 mg. per cent; BUN, 74 mg. per cent; alkaline phosphatase, 14 K-A units; SGOT, 62 units. On Aug. 18 the total bilirubin was 6.9 mg. per cent, direct was 3.5. The urinalysis showed negative results for bilirubin but positive for urobilinogen. The serum chloride was 77; CO_2, 34; potassium, 2.9, and sodium, 122. These were corrected with IV solutions.

On Aug. 19 he had severe chest pain and spit up bright blood-tinged sputum. His blood pressure was 150/100, respiration was 26, and pulse, 100. The EKG showed no change. By Aug. 20 he had developed a gasping type respiration and an irregular cardiac rhythm. Occasionally he had episodes of shaking of both upper and lower extremities and turning his head toward the left. On Aug. 21 he became more confused, less responsive, his respiration became more labored, and he expired.

DISCUSSION

Dr. J. R. Snavely: "I didn't see this man while he was alive so I am not handicapped by personal observations. I have attempted to break down the big picture into perhaps four parts. I think that the first point one would make is that the patient is 53 years old and white and was carried off by a devastating illness in less than a year. The four parts of his illness are (1) a period dominated by arthritis, (2) a period when attention at least was focused heavily on the lung, (3) an episode of bleeding from the nose which seriously exsanguinated him and for which I gather no anatomic counterpart was found, and (4) a sort of a finale dominated by increasing chest signs and also by signs of liver impairment and renal insufficiency and involving perhaps the catastrophic type of terminal episode that we see so commonly at these exercises with pulmonary embolism.

"I did a great deal of studying on the syndromes of this sort, and I am not at all satisfied that I have an even slightly satisfactory diagnosis despite the fact that the man had a thoracotomy and an adequately described lung biopsy, although it may be that this was more diagnostic than the protocol indicates. If it were completely diagnostic, it would take most of the fun out of this exercise to thus report it. We have to allow for that I think.

"Now I shall run over a few of the high points. Early in December 1960, the patient became aware of arthritic manifestations including the small joints of his hands, and there was a reasonable amount of response to salicylate and steroids. There was an episode of nausea and vomiting and some rather nondescript indigestion for which he was studied and for which no firm diagnosis was made. There were some equivocal findings in joints, perhaps thickening at the PIP joints, a trace of clubbing, some abnormalities of the right elbow, and a leukocytosis. On May 1 there was an episode of right parasternal pain; the precise qualities of this pain are not described very well. There was also fever. There was cough and shortness of breath. On physical examination there were rales in the lungs. There was tenderness at the right costochondral junction. The liver was a little down. There was a little clubbing.

"The white count was elevated and the globulin was modestly elevated. For the first time we are given some fairly definite changes in the lungs which we will review all together later. There was just a hint that the heart might have enlarged a little bit over the first film, but I won't try to guess on that. There was a diffuse x-ray finding, and there was a diminished oxygen concentration after exercise which 100 per cent oxygen didn't correct. One ordinarily thinks that with alveolar capillary block there is a partial at least correction and perhaps we are dealing with that here. One is also, I think, entitled to wonder about the possibility of venous mixing. I am going to ask Dr.

Tyler to comment on the lung picture later. The patient was started on prednisolone.

"On June 23, having been out of the hospital only a few days, the patient came back into the hospital complaining of severe chest pain of a degree which required narcotics. At this time the lung findings were still more definite. A degree of anemia had appeared as indicated by a hematocrit reading of 36. The serum albumin was a bit lower. The white count was sharply elevated, and because of the possibility of tuberculosis (although I gather it was not proven), the patient was put on INH and streptomycin. On June 24, further studies were made. Bronchoscopy was not helpful, and a lung biopsy was made. This was reported as showing evidence of pneumonitis, fibrosis, and bronchiolar metaplasia. It would be interesting if necrosis or a granulomatous reaction with giant cells were described, because one of the possibilities that we will entertain has a reasonably characteristic picture on lung biopsy.

"On July 3, there was severe substernal pain with cyanosis and tachycardia, and a pleural friction rub on the left was detected. Digitalis was given somewhat diffidently, I gather, and from that time on he continued to have episodes of chest pain with cyanosis and dyspnea and developed a left pleural effusion. This sequence of events is reasonably compatible with pulmonary infarction and wouldn't help us tremendously as far as a specific diagnosis is concerned because so many of our patients with serious disease follow this path terminally.

"On August 4, he had an episode of bleeding from the right nostril. I can't make up my mind whether this occurrence is intrinsic to his basic diagnosis or whether it is just a side show. There is no mention of an examination of the nose itself. I take this to mean that this was bleeding from the conventional area in the nasal mucosa. As a matter of fact, I asked the resident who worked up the summary whether any specific granulomatous lesions were described in the nose and he said there were none. At any rate, it became a devastating thing, and the patient kept on bleeding and oozing and apparently swallowing the blood, although I don't think we ought to be too confident about this. He could have been bleeding from something else on down his intestine. At any rate, 17 units of blood were required until finally the appropriate external carotid was tied and from that time on there was no more bleeding.

"At that time the last segment of his illness was ushered in by further breakdown in other organs. There was elevation of the BUN, perhaps indicating a degree of renal insufficiency, but as you have been told many times, the BUN is not at all specific in this setting and could be related to the occurrence of lots of blood in the gut. The creatinine would have been most helpful at this juncture. He was jaundiced; the bilirubin went up to about 5 but half of it was the one minute direct and I don't find this particularly helpful. I think it could be a combination of hepatic hypoxia and a tremendous overload of bilirubin from the transfusions. There was probably an element of hemolysis in it and no doubt an element of liver damage, although such liver damage, I suspect, would not be specific and was more or less a hypoxic affair. The alkaline phosphatase was within normal limits, and the SGOT was only slightly elevated. There was no bilirubin in the urine, and this could be used as a dab of evidence that a hemolytic process was prominent. Terminally, the potassium was low, the CO_2 high, and the chloride low. The picture does suggest a hypokalemic alkalosis, and one would hope that correcting this hypokalemia would favorably influence the metabolic alkalosis which I believe was present. Terminally, there was more chest pain. The patient spat up some bright red blood and died.

"Let me say again I am going to ask Dr. Tyler to discuss the lung part, Dr. Perrine to say a word or two about the blood things, and Dr. Sloan to show the x-rays. First, however, I would like to bring up a series of possibilities. Perhaps we can ask a few more specific questions.

DIAGNOSTIC POSSIBILITIES

"I think the possibility of an infectious granuloma, of course, has to be seriously considered. By that I mean tuberculosis or mitotic disease. I suppose a variation on sarcoidosis produced this picture, but I don't believe I have the right to make that diagnosis. Rheumatoid arthritis occasionally is associated with an infiltrative process in the lungs, and Dr. Tyler will give us a word or two about this. The same thing might apply to the Hamman-Rich syndrome, an entity which we find useful clinically but which is a little hard to come to grips with pathologically. Then in the tumor package I suppose we ought to think at least about pulmonary adenomatosis, but surely this doesn't sound much like that. I find that I am retreating to the familiar refuge of the CPC discusser, collagen diseases, to explain a multiple system disorder of this sort. Here I am particularly thinking about a variation on the theme in polyarteritis nodosa with lung lesions and a rare but extremely

interesting clinical entity called Wegener's granulomatosis.

"Dr. Sloan, these are most of the situations that we would be concerned about clinically, I believe, and we would be most grateful for any help."

CHEST FILMS

Dr. Robert D. Sloan: "A series of chest films are available, taken over a six months' period. The first film, obtained in February 1961, appears normal save for a questionable slight coarsening of the parenchymal markings. A film obtained four months later reveals rather extensive parenchymal changes, with a fine, diffuse, reticular, infiltrative pattern being noted throughout both lungs. The heart and great vessels appear normal, as do the hilar areas. The basic pattern of the lung findings did not change significantly during the remainder of his hospital course, although he was apparently in such poor condition that only recumbent chest films were feasible during the final weeks of his illness. A minor pleural reaction developed on the left, but only following the lung biopsy, so that this could have been secondary to the surgery or possibly an infarct.

"As regards the radiologic pattern in the lungs, there are a large variety of disease processes which could produce these changes, and there is nothing on the films which would permit me to select any specific entity."

Dr. Snavely: "I think that is very helpful indeed. Now Dr. Perrine, our resident on hematology at the moment, has reviewed the hemalogic data from the standpoint of how central the hematologic problem is in this man's disease, and he has told me elsewhere that he feels that these changes are not primary in any sense of the word. Would you give the students a quick rundown on your interpretation of these?"

HEMATOLOGIC DATA

Dr. John D. Perrine: "As Dr. Snavely said, it appears that most of the bleeding difficulty is not due to intrinsic hematologic disease but more likely due to a local vascular problem. On all of his admissions prior to the last one he had normal platelet counts, and on his last admission he had 106,000 platelets on the first examination which is certainly adequate. Bleeding is not commonly seen with 100,000 platelets or more. He began bleeding and a prothrombin time was done which was 50 per cent activity with a factor 10 deficiency noted. This really doesn't help much as factor 10 deficiencies are quite common in people who are acutely and severely ill. I think we can write off a circulating anticoagulant since he did have a 10 deficiency reported. This evidently was corrected and most circulating anticoagulants are not corrected with plasma or serum. Following this, he bled rather profusely and was given blood and more of his coagulogram was done. His clotting time then was 11 minutes which is within the range of normal. His prothrombin activity then was 100 per cent. His platelet deficiency here could be explained on the amount of blood which was given which was certainly quite a bit. He had a prothrombin consumption of 19 seconds and an oil clot retraction of 14 per cent, both of which were low and both of which we can blame on his 100,000 platelet count. From the information that we have, most of which was obtained after he was given blood, we can not blame any specific coagulation defect.

"He did have a monocytosis on all three admissions. We consider the upper limits of normal here to be 300/cu mm. He had 1900/cu mm on one occasion and 1300/cu mm on another occasion. If you are considering a granulomatous disease, tuberculosis would seem to be the one of choice in view of this monocytosis."

Dr. Snavely: "There are a number of hints there that tuberculosis would fill the bill, but as Dr. Sloan pointed out, this picture should be completely and spectacularly evident on the lung biopsy. Well, then we can say that the bleeding problem as far as hematologic change is concerned is probably not central in this man's disease and that most of the abnormalities can be explained on the basis of a degree of thrombocytopenia secondary to the many transfusions. I think that a vascular lesion in the nose either unrelated to the main disease or a part of the main disease could easily account for the bleeding problem. Well, Dr. Tyler, it seems to me that whatever secret is to be revealed must concern the lung. Would you care to comment on possibilities?"

LUNG BIOPSY

Dr. Myra D. Tyler: "I did have the opportunity to see this patient briefly during his second admission in June 1961 while doing some of the studies in an attempt to define the physiological status of his pulmonary disease. I did not follow him during his subsequent course. However, I do recall what was found at surgery in term of palpation of the lungs and have looked at the biopsy but cannot recall anything more specific than

was listed in the protocol. One important thing might be said regarding the findings at surgery, the lung was heavily involved with the disease process regardless of the rather scant showings on x-ray and was grossly infiltrated with a disease process which changed the palpation characteristics. There was a distinct lack of crepitation. This finding suggests that the process rather remarkably involved the entire lung parenchyma despite the relatively minor evidence on x-ray. This disparity mitigates against tuberculosis, although in general one can palpate more than one can see on x-ray, and see more on biopsy than one can palpate in this disease. The impression of the surgeon certainly was that more abnormality should have shown on x-ray considering the lack of crepitation.

"Regarding the physiological studies, this patient had no evidence of either restrictive or obstructive impairment as far as pulmonary mechanics were concerned. At rest, O_2 saturation was borderline with a saturation around 90 per cent. On rather mild exercise O_2 saturation fell. At this time he did not get short of breath but developed pain in his leg. On breathing 100 per cent oxygen his O_2 saturation rose to 95 per cent which is a significant elevation over rest or exercise but still not 100 per cent. These findings suggest a combination diffusion and profusion/ventilation abnormality syndrome. This could result from a process of rather rapid changes in the pulmonary vascular tree, such as proliferation of capillaries and intercommunications between the bronchial and the pulmonary capillaries. Such communications are known to be present in normal as well as in disease processes. If increased to a significant amount, these communications can account for the venous admixture despite the 100 per cent oxygen.

"Using this information and considering the severe epistaxis which in essence heralded the downhill course, I went through various cases which are reported in the literature as Hamman-Rich syndrome and managed to find one where profuse epistaxis was part of the problem. In that patient the epistaxis did stop with blood transfusions and steroids which were given to the patient for the first time. The patient survived this bleeding episode despite a drop in hematocrit from 55 to 20 within a matter of two days. Pulmonary hemoptysis is not a characteristic part of the Hamman-Rich syndrome, but again one can find reports where this symptom has occurred.

"Regarding the arthritic symptoms, I checked with Dr. McDuffie this morning, and he assured me that the latex test should not be negative if rheumatoid disease is responsible for lung disease of either infiltrative or nodular character. This leaves us with a patient who has considerable disease in his lungs which is far in excess of that which can be seen on x-rays, who has the physiological status of a diffusion abnormality combined with a profusion/ventilation imbalance, and who has also some joint symptoms. I was going to put in marrow symptoms because of the initial leukocytosis and the slightly abnormal differential and decide this might fit into the syndrome which is now known as Histiocytosis X including Letterer-Siwe's disease and eosinophilic granuloma. As I interpret this process from reading about it (Dr. Brunson will have to correct this), differentiating this group of diseases from diffuse interstitial fibrosis of undetermined etiology demands special stains. No mention of fat stains is made, therefore I can not eliminate this possibility. I would close by suggesting this patient would fit either the Histiocytosis X group or the Hamman-Rich syndrome, etiology undetermined."

DISCUSSER'S DIAGNOSIS

Dr. Snavely: "Well, I think that is most helpful, and we will certainly leave those on our list. I will say once more that as physicians our first job is to decide if this man has tuberculosis or treatable fungus disease or not, and we have seriously considered this and discarded it. I will not say anything more about pulmonary adenomatosis because this isn't the picture of it, and I do not think this is the picture of chronic pulmonary microembolism either. I do believe that the terminal event probably represents pulmonary embolism with infarction, but I do not believe that this was central in the disease earlier.

"Just to keep a chip on all the squares, I believe I will select a diffuse involvement of blood vessels as my leading diagnosis, and I will say that the intractable epistaxis is part of this. Also I believe the lung infiltrates, the terminal azotemia, and arthritis was part of it. I think there are variations on polyarteritis nodosa that fit this reasonably satisfactorily, and a still more exotic one is the entity to which I alluded earlier, i.e., Wegener's granulomatosis. This not infrequently, I am told (I have never dealt with a patient with it), starts out with rheumatic symptoms, goes through a phase of chronic pulmonary infiltration, and is quite often associated with granulomatous lesions in the nose and pharynx. One could speculate that

this bleeding was coming from such a lesion which it was not possible to recognize. Terminally, the picture is dominated by renal insufficiency, and I am told that the kidneys are quite consistently involved although the renal insufficiency may appear with explosive speed. So I will stay with polyarteritis nodosa, variant Wegener's granuloma. Anybody else care to get in this act?"

Dr. Sloan: "I would like to disagree mildly with Dr. Tyler on her observation that the x-rays look relatively normal. I think they reveal extensive pathology in the lungs."

Dr. Snavely: "Dr. McDuffie, you had a lot to do with this man. Would you care to speculate?"

Dr. Frederic C. McDuffie: "I followed this man along with Dr. Ward from the time he first came into the hospital. I was under the impression at that time that he did have some clubbing in his fingers and that his joint symptoms were primarily in large joints. I did not think he had rheumatoid arthritis. We took the chest x-ray at that time because of the clubbing. As far as the vasculitis is concerned, I recall reviewing the lung biopsy with Dr. Hare at the time it was done. We had a lot of discussion about it but he was not, as I recall, very impressed with vascular disease in the biopsy and also was not impressed with there being necrosis such as one would expect to see in Wegener's granulomatosis. We thought the man had chronic pulmonary fibrosis."

Dr. Snavely: "Well, Dr. Brunson, we are weak with anxiety."

AUTOPSY REPORT

Dr. Joel G. Brunson: "Just exactly what this patient had is something of a problem, as far as putting a name on the condition. The lungs, as have already been described at the time of surgery, were both heavy, and there was a marked loss of elasticity. Both pleural cavities were obliterated by dense, fibrous adhesions. The left lung, in particular, had a fairly thick rind over the pleural surface. Both lungs were grossly and diffusely involved by fibrous tissue proliferation. There were, incidentally, no obstructive lesions of the pulmonary arteries in the way of emboli. Microscopically, there was a very marked thickening of septal walls, with actual fibrous tissue obliteration of the alveolar spaces in many areas, unaccompanied by any extensive degree of inflammation. In some open spaces, there were aggregates of pink staining material resembling the hyaline type of membrane. The impression was gained that the pathogenesis of the condition represented organization of this material, with gradual obliteration of the pulmonary air spaces. We were not impressed with the degree of pulmonary vasculitis. In some areas of the lung there were obliterated vessels but this, I think, is part and parcel of the pulmonary fibrotic process. There are not any definite clues as to the etiologic factors that are involved in the pathogenesis of this lesion. There are some suggestions in other organs, and as we go along, I will try to point those out. Thus, in looking at the lungs, one is left only with the diagnosis of idiopathic fibrosis, undetermined as to cause.

"In looking at other organs, such as the liver (Figure 1), one section showed a fairly large artery in which there was extensive hyaline necro-



Figure 1

sis of the outer portion of the wall—a deposition of hyaline material, together with a fairly marked inflammatory reaction. This lesion, if present in other arteries, would almost certainly be called polyarteritis. However, we feel a little bit uncomfortable about putting the disease in this patient in a more or less definitive category of polyarteritis having found only the one artery. However, I should mention that when one looks at a 7 micron section and finds one artery, it is perhaps suggestive that there must be others in other portions of organs.

"The kidneys also showed rather peculiar changes. They were both enlarged and mottled, suggestive of a type of glomerular disease. Actually, however, the process turned out to be more of a vascular disease. In numerous areas of the

kidney (Figure 2) were found concentric intimal proliferation of large and medium-sized arterioles. This is reminiscent of the changes that one sees in malignant hypertension. As far as I know, this patient had no history of hypertension, particularly the accelerated or malignant form of hypertension. In other areas of the kidney were found hyaline thrombi in scattered sections of glomerular capillaries. In other sections of capillaries there was coalescence of the capillary loops, occluding segments of glomerular capillaries. Still in other areas there was smudging or fibrinoid necrosis of small arterioles, particularly the afferent arterioles, without a surrounding inflammatory reaction.

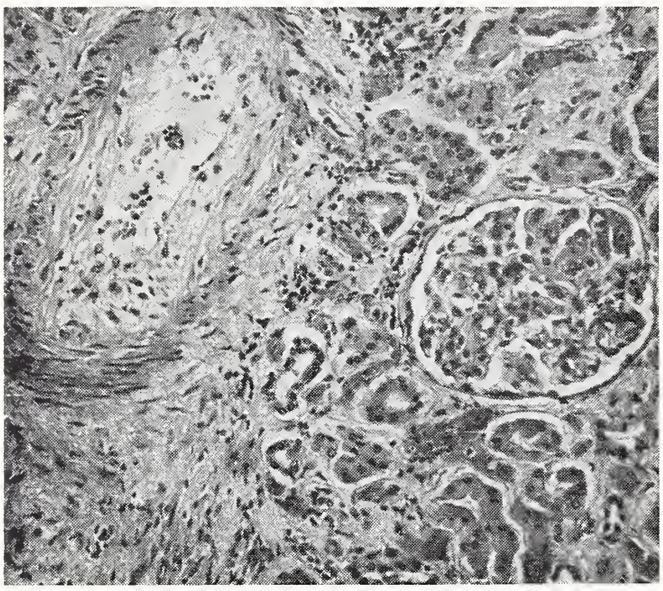


Figure 2

"In essence we are left with what appears to be a case, if I may use the term, of a mixed up collagen or connective tissue disease. The pulmonary fibrosis that is present in this particular case is not unlike that which occurs in cases of scleroderma. There is not, however, any other evidence of scleroderma in this case except for the kidney. The arterial and arteriolar lesions in the kidneys are strikingly similar to the changes which occur in scleroderma. The lesion in the liver, however, is much more like that of polyarteritis so that we can not place a more definitive term on that than it belongs in that group of hypersensitivity, or collagen, or fibrinoid, or connective tissue disease. Perhaps, Dr. Snavely, you would care to elaborate on some of your comments. I think this is probably not Wegener's granulomatosis because of the absence of changes in the lungs."

Dr. Snavely: "I don't believe I have anything to add, except to agree clinically if we regard collagen diseases as a spectrum type of problem anyway, and I think it is about as often as not that a given patient doesn't fit well into our prescribed ideas, the main exception being systemic lupus erythematosus. Dr. McDuffie, do you want to comment again on this particular case?"

STEROID EFFECTS

Dr. McDuffie: "I would like to ask Dr. Brunson whether he thinks it conceivable that any of these changes such as those shown in the artery in the liver or the renal changes could be related to the large dose of steroids that he received? As you know, certain patients with rheumatoid arthritis develop a vasculitis which certainly occurs much more commonly among patients getting large doses of steroids. Many believe that this arteritis may be related to steroid therapy."

Dr. Brunson: "On one hand, in evident cases of polyarteritis, one uses steroids in order to correct vascular lesions. On the other hand, in rheumatoid arthritis, we are apt to attribute the vascular lesions to the steroids, so I suppose you can more or less take your choice. I believe the evidence indicates, however, that this patient had rheumatoid arthritis."

Dr. McDuffie: "No, I don't believe he had rheumatoid arthritis. All I am saying is that such tremendous doses of steroids might cause vasculitis in a susceptible individual."

Dr. Brunson: "Yes, it is conceivable that the proliferation that one sees in the renal arteries might be representative of steroid therapy."

Dr. Snavely: "One could almost reason that it was a classical Wegener's granulomatosis or polyarteritis modified by steroids."

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LOW COMPRESSION

Making the rounds in Washington: Newest car on the market is the Congressional 88. It has an excellent motor but can't pass anything.

SPECIAL ARTICLE

The Language of Genetics

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With the addition of genetics to the practicing physician's armamentarium, a new terminology has been absorbed into the medical vocabulary. In this article, the author reviews old terms and defines and discusses some new ones. He concludes with the observation that study of the human chromosome is a highly technical procedure carried on by a limited number of researchers. However, he writes, the findings of those who are doing this work extend significantly into almost every branch of clinical medicine in some direct or devious manner, and physicians must be prepared to understand the results of these studies.

ALTHOUGH MENDEL SET DOWN the basic facts of inheritance in 1866 and Miescher discovered DNA shortly after the Civil War, it is only in recent years that genetics has ceased to be merely a field of knowledge and become a tool for clinical medicine.

This process of applying old known facts of basic science to the actual practice of medicine requires that new words be coined and unfamiliar terms dusted out of the textbooks. This article represents an effort to review some old terms, define and add some new ones, and relate them all to recent developments in this field. It is not designed to be either profound or original, but simply to make recent medical literature in which genetics plays a part more useful to the practicing physician.

RECENT FUNDAMENTALS

First it might be well to discuss a few relatively recent developments which are basic. One of these concerns the chromosome number, a figure which, in man, was accepted as 48 until recently when it was definitely established as 46. Another fact has to do with the so-called *sex chromatin.* Barr demonstrated the material as a particle which could be found in the nuclei of cells from the nervous system of female cats. Clinically, it is most easily found in cells scraped from the buccal mucosa or as "dumbbells" in the polymorphonuclear leukocytes. Individuals in which this material can be demonstrated are said to be *chromatin positive* and are presumed to be female. Males lack the material; they are *chromatin negative.* There will be more explanation of this phenomenon later in connection with discussion of chromosomal aberration.

From the Department of Pediatrics, Jefferson Medical College.

Each chromosome is made up of *genes,* the basic hereditary determinants. These genes are aligned on the chromosome and each chromosome is paired, one from the father and one from the mother. Characteristically, then, the genes, too, will be paired, one from each parent. The *genotype* refers to this actual constitution of the chromosomes, the genetic make-up of the cell, and is something which one can determine only indirectly, in most instances, by study of the ancestry and the progeny. This is in contrast to the *phenotype,* the actual demonstrable characteristics of the individual possessing these cells. Thus, it will be seen that the genotype of an individual is not necessarily manifest in that same individual's phenotype. This will be further clarified later.

As we have said, the genes are ordinarily paired, and they may be paired in contrasts so that one may think of one gene as being "for" a trait, a determinant gene, while its mate may be "not for" the trait, a neutral or nondeterminant

gene. These pairs of genes are called *alleles*. Some traits, in order to be manifest in the phenotype, require two genes "for" the trait, in which case the trait is said to be *recessive*. Other traits will appear in the phenotype even though only one gene "for" the trait is present. Such traits are said to be *dominant*. If an individual has two genes for the trait, he is said to be *homozygous*. Therefore, if the trait is recessive but is manifest in the individual we know that person is homozygous. If the individual has only one gene "for" the trait he is said to be *heterozygous*. Consequently, if the trait is dominant, it is manifest in the individual and we have no direct way of knowing whether the person is heterozygous or homozygous since it would be manifest in either case.

In actuality, dominance is a relative term so that one can have *incomplete dominance*. In this way a heterozygote for a recessive trait may show minor manifestations as, for instance, the mild sickling of the individual who is heterozygous for sickle cell disease. However, in the case of most traits, the phenotype of the heterozygote betrays no evidence that he is carrying the recessive gene.

This concept of incomplete dominance should not be confused with that of varying degrees of *penetrance* of a trait. Penetrance is a statistical concept. Some traits, both recessive and dominant, have complete penetrance and will appear as expected in their homozygous or heterozygous capacities to make their appearance. This would apply, for instance, to the blood groups. Other traits have *incomplete penetrance* and may not be manifest because of environmental or more poorly understood factors. Diabetes and multiple exostoses are examples. Some, such as pyloric stenosis, have their degree of penetrance influenced by sex, even though they are not actually sex-linked in a sense which will be discussed later.

TRANSLOCATION

Ordinarily, as has been said, the chromosomes are aligned and the genes paired in an orderly manner. Furthermore, this order is maintained from generation to generation. However, a portion of a chromosome consisting of one or more genes may be broken off and exchange places with a portion from another chromosome. Such a process is known as *translocation* and it gives rise to a chromosomal aberration without any change in the total chromosome count.

Actually, this is a much oversimplified explanation of a complicated process. It is true that a spontaneous aberration can arise in this manner. However, it can also give rise to "carriers" of a trait. One may, for example, have mongolism with a normal chromosome count or the individual may be a "carrier" of this condition. Such "carriers" were recently shown to have only 45 chromosomes. When detailed chromosome study becomes a laboratory procedure which is generally available, the practical application of such findings are obvious. The mother who already has one mongoloid and a chromosome count of 45 can be given counsel accordingly.

THE SEXES

All human cells normally have 46 chromosomes. This includes two *sex chromosomes* which in the female are paired as *XX* and in the male as *XY*. Besides these sex chromosomes there are 44 others, and these are called *autosomes*. The Y chromosome carries no determinants except those which have to do with "maleness." However, the X chromosome carries determinants for a number of other traits. These traits are therefore said to be *sex linked*. Consequently, if it is sex-linked and recessive, a trait will not appear in the female phenotype, although she may carry the genes for such a trait to her progeny.

The *germ cell* in the male is the sperm while that of the female is, of course, the ovum. Before these cells combine to initiate formation of a new offspring they undergo a process of division which is peculiar to germ cells as contrasted to other cells. This process is called *maturation* and the resulting cell is called a *gamete*. During this process the germ cell has its chromosome number reduced from 46 to 23, and this division is called *reduction division,* accomplished by a process of *miosis,* as contrasted to subsequent division by a process of *mitosis*. It can be seen that some of the male gametes will contain an X chromosome and some of them a Y chromosome, while the female gametes will each contain an X chromosome. The reduced number of chromosomes present in the gamete is termed the *haploid number* (n) while the full complement of chromosomes consists of a *diploid number* (2n). The union of the two gametes results in a *zygote*. The zygote may be a *homozygote* (with respect to given traits) or a *heterozygote*. This differentiation has been made in the discussion on heterozygous and homozygous.

NONDISJUNCTION

When the sperm and the ovum unite, there are normally 23 chromosomes from the sperm and 23 from the ovum. However, one gamete may retain a chromosome and at the same time receive one from the opposite cell, giving rise to an extra chromosome in the zygote. The total count may then

be 47 or it may even be 48 or more by a similar process. The mechanism by which this occurs is called *nondisjunction,* and it gives rise to chromosomal aberrations. This aberration is designated as *trisomy* if there is one extra chromosome (2n+1) or polysomy if more than one extra chromosome (2n+1+1 or 2n+1+1+1, etc.). If, instead of having XX or XY, the individual has XXX or XXY, there is trisomy involving the sex chromosomes. The presence of more than one Y chromosome is lethal, or at least one does not find cells of such a constitution. However, there are such aberrations as XXXX or XXXY, a polysomy involving the sex chromosomes. Trisomy can also involve autosomes. One may, for instance, have trisomy of chromosome No. 21. In this connection another term which is sometimes used is *ploidy.* This refers to variations from the normal number of chromosomes. If there is an addition of one or more chromosomes without the addition of an entire complement or set, the condition is called *aneuploidy,* the cells so affected being termed *aneuploid.*

Sometimes there may be a mixture of aberrations, and these may be difficult to demonstrate, being found, for instance, in one tissue and not in another. There may be such combinations as XXX and XXY, in which case the individual is said to have an XXX/XXY *chromosomal mosaicism.* The number of combinations are apparently almost unlimited—XXX/XX/XXY, XXX/XX/-XO, etc.

Now, going back to the sex chromatin, I said that it was characteristically present in the female. However, Y is a determinant for "maleness" and where it is found the individual is likely to be a phenotypic male. The person who is XXY will appear to be a male. Still, such an individual will have sex chromatin demonstrable in his buccal smear. Apparently the demonstration of sex chromatin is dependent upon the presence of at least two X chromosomes. Consequently, XXXY would be expected to be associated with a condition in which one would classify the individual as chromatin positive, although he will have the appearance of a male.

THE KARYOTYPE

It might be presumed that as we gain knowledge we might relate various specific demonstrable chromosomal aberrations to their associated physical, mental, serological, chemical, and other abnormalities which can also be demonstrated clinically. The chromosomes can be studied and have been classified, grouped, and numbered. The total chromosome picture as they are mapped, placed, studied, and identified in this manner is known as a *chromosome karyotype.* Aberrations, as we have seen, may arise through nondisjunction or they may arise through translocation. Nondisjunction can occur "accidentally" in any given case and will result in an abnormal total chromosome count. When it occurs and involves chromosome No. 21, for instance, the total count will be 47, as in sporadic mongolism. However, if, in an ancestor, No. 21 has become abnormal because of translocation, the defect may be propagated in that ancestor's gametes, the defect being carried on to his progeny, as in mongolism of gentic determination. The total count will, in such a case, be normal, but the karyotype would demonstrate translocation involving No. 21.

Along these same lines, an individual with more than two X chromosomes is usually (but not always) mentally defective. In population studies there will be an increased incidence of mental retardation in a population of individuals with aneuploidy involving the X chromosome than there will be in the general population.

CONCLUSION

Karyotype studies of the human chromosomes is a highly technical procedure which involves culturing the bone marrow under conditions which bring out mitosis in an optimum stage. After special preparation the chromosomes are photographed, enlarged, separated, individually identified, paired, grouped, and mounted. Obviously this is not a procedure for most laboratories, but reports of the findings of those who are doing this work are so important that we must be prepared to understand something of their findings. These findings extend significantly into almost every branch of clinical medicine in some direct or in some devious manner. I hope that this short article will contribute to an understanding of reports in the rapidly growing field of genetics as they are directed to those of us in the practice of medicine. ★★★

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Radiologic Seminar XIV
Esophageal Carcinoma

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FOR ALL PRACTICAL PURPOSES, carcinoma of the esophagus is incurable. Smithers,[1] in reviewing the world literature in 1957, found over 8,000 cases reported with only 135 surviving 5 years. This is a cure rate of only about 1.7 per cent, which is reflected in most series as being between 1 per cent and 3 per cent. Isolated series on selected cases may suggest a higher cure rate, but these are probably more apparent than real. Buschke[2] reports 20 per cent survivors using supervoltage irradiation for cases of cervical esophagus while Sweet[3] reports 15 per cent survivors following surgery for carcinoma of the distal esophagus.

At the University Hospital 40 patients have completed cobalt-60 irradiation therapy for carcinoma of the esophagus. The average survival time from the beginning of therapy was slightly over 8 months. One patient survived for 36 months, the longest survivor of the series, there being no 5 year survivors. His case is presented below:



Figure 1. Barium swallow revealing an obstructing process in the mid-esophagus, the pattern being typical of a carcinoma.

R. B. No. 27569, a 70-year-old Negro male, was first seen at the University Hospital on Feb. 21, 1958 with the chief complaint of being unable to swallow. His symptoms had been present for only about one month and had progressed from difficulty in swallowing solid foods to inability to swallow liquids. There had been only slight weight loss. A barium swallow revealed almost complete obstruction in the mid-esophageal region with irregular and ragged mucosa, most likely a malignant neoplasm (Figure 1). Esophagoscopy revealed a fungating mass, and a biopsy was reported as undifferentiated carcinoma of the esophagus, probably squamous cell type.

The patient was given cobalt-60 teletherapy through opposed anterior-posterior ports measuring 14 x 6 cm. in size. Thirty-two treatments over a 44 day period were required to deliver approximately 5,500 roentgens to the tumor. Following the irradiation treatments, the patient was able to eat anything

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, University of Mississippi School of Medicine.

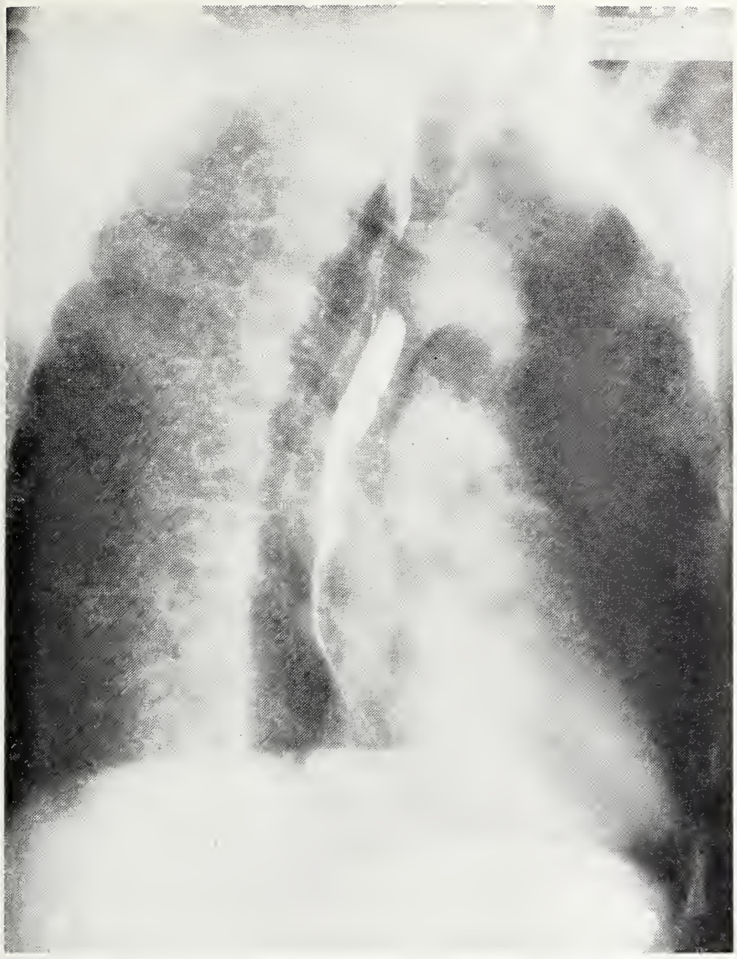


Figure 2. A barium swallow two years following irradiation, demonstrating a patent esophagus with a normal lumen.

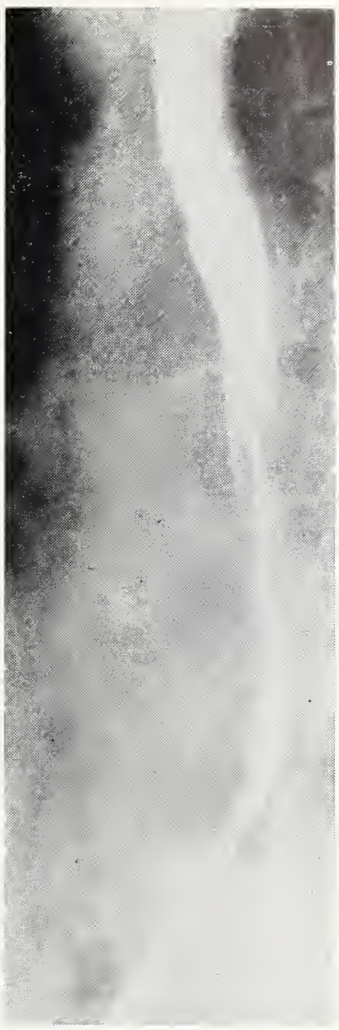


Figure 3. A more detailed view of the appearance of the esophagus following therapy, showing the normal appearing mucosal pattern.

he desired. An esophagogram, approximately two years post-therapy, revealed an essentially normal lumen and mucosal pattern (Figures 2 and 3). He remained well until 1961 when he began having symptoms from widespread metastatic disease, and he expired outside of the hospital on Feb. 23, 1961.

This patient's x-ray films demonstrate the remarkable palliation that can, at times, be afforded a patient with obstructive carcinoma of the esophagus. It is not unusual to control the primary disease only to lose the patient from metastases.

Esophageal carcinoma is seldom diagnosed early due to the lack of localizing symptoms. The first recognizable symptom is usually dysphagia which indicates some element of obstruction. Diagnosis is made by barium swallow and confirmed by esophagoscopy and biopsy. The classical "shelving" and obstruction shown in the case presented are manifestations of extensive disease, earlier signs being merely a roughening of the mucosa and some irregularity of the esophageal wall. The tumor frequently extends much further along the esophagus than is apparent on the x-rays, which makes cure by limited resection or radiation impossible. Due to the proximity of the trachea to the mid-esophagus, carcinomas in this area often result in tracheo-esophageal fistulas and mediastinitis. It has been suggested that all patients with lesions in this region of the esophagus also be bronchoscoped.[4]

At the present time it seems that supervoltage irradiation is the best treatment for carcinoma of the upper and middle thirds of the esophagus while surgery is best in carcinomas of the lower third.[5] While the cure rate remains quite low with present methods of therapy, one can frequently offer some degree of palliation. ★★★

2500 North State St.

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The President Speaking

'Integrity—Not Compromise'

JOHN G. ARCHER, M.D.
Greenville, Mississippi

THE TUMULT AND SHOUTING, the sound and fury are about to begin in earnest. Have fear of neither riot nor civil commotion: it's just the quadrennial state election campaigns during which the Mississippi electorate will decide who is going to be what from constable up to governor. But this election is of special interest to physicians who have more at stake than their obligations of citizenship.

A new legislature will be chosen. When it convenes in regular session in January 1964, not the least of its problems and challenges will be in the field of health and medical interest. There are changes to be wrought in the Medical Practice Act with respect to revocation and suspension of licenses to practice as well as the issue of mandatory internship. The association's number one legislative objective of full implementation of the Kerr-Mills program may well also be the state's number one health issue.

And the chiropractors, flushed with victory from license-by-Rockefeller in New York, will undoubtedly make another bold bid for the badge of legality and sanction in Mississippi. The integrity of our private health care system and the clinician's professional partnership with those in preventive medicine and public health must not be compromised as they were in New York.

Now is the time to discuss these issues. Candidates for the legislature are interested in knowing what physicians think. Every office seeker who aspires to serve in our House of Representatives and Senate should be seen personally. And they should know that physicians will not compromise the integrity of scientific medicine. ★★★

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

Volume IV, Number 6

June 1963

EDITORIALS

The Wall Street Journal and Narcotism

I

THE LAST OF 10 CENT status symbols is a copy of the *Wall Street Journal* tucked under the arm, folded outward to assure ostentatious display of the masthead. In fact, it almost takes the place of the grey flannel suit, tab collar, the very sincere tie, and shell cordovan shoes. But even the imperious arbiter of the financial world has a little metatarsal clay, well-illustrated on the editorial pages of its April 17 and 24 editions.

Commenting on the President's Commission on Narcotics and Drug Abuses, the *Journal* tackled the whole package of addiction, illicit drug traffic, the Harrison Act, and treatment procedures in about a score of column inches. Now, in all fairness to this authoritative and influential paper, much of the editorial, "Narcotics Policy: Addiction to Failure," not only made good sense, but it also proceeded from a thoroughly enlightened viewpoint. In deploring addiction evils in terms of crime, social decay, and human suffering, it accurately portrayed the conviction of every thinking American.

On the other side of the coin, however, some disservice may have been done by this same well-structured editorial when it branded the Harrison Act a statutory flop and made a plea to "start searching for ways in which the tragic incurables can be put on sustaining doses that will keep them from desperate acts." Not only is it shocking to see this incredible assertion in the *Wall Street Journal,* but it is also unbelievable to realize that this conservative giant of truth and objectivity has gullibly swallowed the long-discredited ambulatory clinic philosophy. Surely, somebody other than a responsible *Journal* staffer sneaked into the press-room while the editor was out for lunch.

II

Nor is this all the story: The editorial goes on to urge that "what we really need is a wholly different approach. Without in any way relaxing laws against the general sale of narcotics," it continues, "we should stop branding every addict as a criminal regardless of the cause of his addiction and denying him any real recourse for treatment except (in) institutions set up for criminals."

This will come as news to Dr. Harris Isbell and his world famous hospital at Lexington. The U. S. Public Health Service could be most embarrassed to find it has been a party to such barbarous practices. The American Medical Association and its state constituents will be organizationally comatose over the revelation, and the U. S. Bureau of

Narcotics will probably petition the Congress for a mass transfer to the Department of Agriculture!

As though the editorial overalls weren't already in the aesculapian chowder, the *Journal* comes back a week later with three columns devoted to the position of the New York Academy of Medicine on narcotism and the law. The academy is, of course, entitled to its opinions, despite their being as different from the position of the AMA and most state medical associations as turnip greens are from *coq au vin*.

The academy is quoted as stating that "sudden withdrawal is the only procedure recognized and sanctioned by the Narcotics Bureau. It is recommended, indeed insisted upon, by them for all addicts." The quotation adds that "it is ironic and tragic that the Narcotics Bureau has been doubly wrong, first in dictating the practice of medicine, and secondly in insisting on unsound treatment." The article then urges that "a national policy be formulated with a central thesis that the addict is a sick person."

III

Once and for all, let's set the record straight. In so doing, let it also be understood that some utterances of the *Wall Street Journal,* however qualified or otherwise intended, constitute an indictment of the medical profession which is erroneous. On May 14, 1962, a joint declaration was issued by the American Medical Association and the National Research Council of the National Academy of Sciences. Mere reference to this statement underscores the *Journal's* errors in fact, misunderstanding of policy, and general misdirection on this vital issue.

AMA and NRC said this: "It is concluded that there is widespread public and professional misunderstanding about this subject, specifically (1) that the Federal Bureau of Narcotics believes drug addiction to be a crime; a belief that is contrary to the federal law and its application by the bureau, and (2) that the American Medical Association proposes the establishment of community ambulatory clinics for the withdrawal of narcotics from addicts or for the continuing maintenance of addicts on narcotics; a belief that is contrary to the official position of the American Medical Association."

Both American medicine and the National Research Council accept the historical premise that society has found it necessary to employ legal controls to prevent propagation of specified diseases which constitute a hazard to the public health. Narcotism is such a hazard. Few will reject the scientific viewpoint that successful and humane withdrawal of narcotics from addicts necessitates constant control in a drug-free environment, always under complete medical supervision. And the Narcotics Bureau concurs in this.

By no stretch of anybody's imagination can this statement of policy be even remotely interpreted as regarding every addict as a criminal, putting them all in jail, and denying for a second that they are sick people, the respected *Wall Street Journal* notwithstanding.

IV

The joint declaration, almost as historic as the Harrison Act itself, supports appropriate and adequate treatment, measures to permit civil commitment for this treatment in a drug-free environment, rehabilitation where possible, intensified research, and wide dissemination of factual information on narcotic addiction.

Independently of other sources, the Mississippi State Medical Association undertook extensive studies on narcotism and in 1959, a policy position growing out of these studies was adopted by the House of Delegates. MSMA denounces the ambulatory clinic program as scientifically unsound. It believes in institutional care under total medical supervision in a drug-free environment—hospitalization, if you please. As corollary measures, the association's position urges correction of causality where possible, that rehabilitation measures be undertaken, and that the patient-addict be assisted in effecting social redress.

The position has been hailed as enlightened and realistic. It is based on reliable studies. And it has never been at issue.

The problem of narcotism is recognized as a serious challenge to medical science and to society. The association's Board of Trustees has stated that "the problem is serious, dangerous, and complex, demanding urgent and decisive action to meet it effectively." On the assumption that most will agree with this appraisal, then the *Wall Street Journal* may have hurt—not helped—realize these goals.

It is to be sincerely hoped that this newspaper, so influential with the nation's leaders in every field of endeavor, will see fit to correct its error. In no small sense, this would increase the stature of this giant of journalism. In the meanwhile, fields of particular interest might be more closely observed and JOURNAL MSMA promises to make no interpretations of the Dow-Jones averages, no forecasts on commodity market behavior, and no speculations on whose stock will split four-for-three before the next dividend period.—R.B.K.

Book Reviews

Peripheral Vascular Diseases, Third Edition. By Edgar V. Allen, M.D., Section of Medicine, Mayo Clinic, Late Professor of Medicine, Mayo Foundation, Graduate School, University of Minnesota; Nelson W. Barker, M.D., Professor of Medicine, Mayo Foundation, Graduate School, University of Minnesota and Edgar A. Hines, Jr., M.D., Section of Medicine, Mayo Clinic, Professor of Medicine, Mayo Foundation, Graduate School, University of Minnesota. 1044 pages with 367 illustrations. Philadelphia: W. B. Saunders Company, 1962. $18.00.

This is an exceedingly detailed and comprehensive treatise on peripheral vascular disease by an outstanding group of the Mayo Clinic. This present third edition includes, for the first time, sections on cerebral artery disease, concepts of blood coagulation and thrombosis, fibrinolysis, physiology of the circulation, angiography, visceral aneurysms and surgical treatment of extracranial cerebral arterial occlusion.

The book certainly achieves its goal to aid not only internists, but also surgeons who deal with vascular diseases and, also, to provide information for those interested in historical developments, physiology, pathology and methods of examination and investigation. The photographs are excellent, particularly those in color.

The authors have presented their material, generally, in a most understandable and practical manner; however, in the opinion of this reviewer, the chapters on angiography, coagulation, thrombosis, fibrinolysis, and purpuras are too detailed for this type of book and could have best been deleted or handled more briefly. The section concerning the etiology and pathogenesis of atherosclerosis could have been limited to the summary on page 285. Most of the information in the chapter on medical treatment is already covered in the discussion of specific disease entities and makes for much unnecessary repetition.

Nevertheless, this is an excellent book and is recommended highly to those working in the field of cardiovascular disease.

WILLIAM H. ROSENBLATT, M.D.

Synopsis of Roentgen Signs. By Isadore Meschan, M.D., professor and director of the Department of Radiology, Bowman Gray School of Medicine, Wake Forest College, Winston-Salem, N. C., with the assistance of R. M. F. Farrer-Meschan, M.D., research associate, Department of Radiology, Winston-Salem School of Medicine. 436 pages with 1488 illustrations. Philadelphia: W. B. Saunders Company, 1962. $11.00.

Dr. Meschan has condensed the vast information from his earlier work, *Roentgen Signs in Clinical Diagnosis,* to produce a most useful radiographic reference tool. The present work presents, essentially unadorned, the excellent line drawings and artful x-ray reproductions which made the earlier work popular among radiology residents.

The outline method of teaching, obviously a favorite of Dr. Meschan, is the theme of this entire work both in its illustrations and its text. In this respect it should find great popularity among medical students and inquiring interns and residents of all specialties.

It has many practical features to attract itself to the desks of practitioners in specialties and general medicine alike. Rating high among these are the "midget exhibits" which combine line drawings of radiographic and pathologic features of disease with brief, clearly outlined descriptions and reproductions of typical radiographs. This accomplishes its purpose of supplying information at a glance and retainable knowledge with minimal study.

Another feature, also a repeat from the earlier work, is the compiling of diagnoses according to a specific roentgen sign. This may sometimes prove confusing to the casual reader, but to an investigator seeking a working differential diagnosis for a radiographic finding, it opens many doors.

The index of this synopsis is quite complete. This reader feels that as with *Roentgen Signs in Clinical Diagnosis* the simplicity of format of this volume together with repeated reference use will soon enable a reader to simply open *The Synopsis* to the page desired.

JACK K. GOODRICH, M.D.

NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

BRELAND, LOREN DEWEY, JR., Jackson. Born Hattiesburg, Miss., Sept. 4, 1934; M.D., University of Mississippi School of Medicine, Jackson, 1960; interned Mississippi Baptist Hospital, Jackson, one year; general practice residency, Mississippi Baptist Hospital, Jackson, one year; elected Oct. 2, 1962, by Central Medical Society.

CLANTON, JERRY NED, Jackson. Born Warren, Ark., May 3, 1933; M.D., Vanderbilt University School of Medicine, Nashville, Tenn., 1958; interned Vanderbilt University Hospital, Nashville, Tenn., one year; pathology residencies, Vanderbilt University Hospital, one year, and the University of Mississippi School of Medicine, Jackson, one year; pathology fellowship, University of Mississippi School of Medicine, Jackson, one year; pathology instructor, University of Mississippi School of Medicine, Jackson, one year; member Mississippi Association of Pathologists; elected April 4, 1963, by Central Medical Society.

HARRIS, JOHN EDGAR, Okolona. Born Okolona, Miss., June 26, 1933; M.D., Tulane University School of Medicine, New Orleans, La., 1957; interned Medical Center, Columbus, Ga., one year; residency, School of Aviation Medicine, San Antonio, Texas, three months; captain, U. S. Air Force, three years; elected Dec. 12, 1962, by Northeast Mississippi Medical Society.

JOHNSON, SIDNEY ALBERT, Jackson. Born Calhoun City, Miss., March 15, 1932; M.D., University of Mississippi School of Medicine, Jackson, 1961; interned Methodist Hospital, Memphis, Tenn., two months, and at Mississippi Baptist Hospital, Jackson, ten months; elected Oct. 2, 1962, by Central Medical Society.

WILSON, CLARENCE DOUGLAS, JR., Ocean Springs. Born Aberdeen, Miss., Oct. 13, 1927; M.D., University of Mississippi School of Medicine, Jackson, 1958; interned Mississippi Baptist Hospital, Jackson, one year; elected Jan. 9, 1963, by Coast Counties Medical Society.

WOOD, ARTHUR EUGENE, JR., Jackson. Born Jackson, Miss., Sept. 30, 1926; M.D., Tulane University School of Medicine, New Orleans, La., 1953; interned Charity Hospital of Louisiana, New Orleans, four months, and at the Confederate Memorial Medical Center, Shreveport, La., eight months; general practice residency, E. A. Conway Memorial Hospital, Monroe, La., four months; elected April 2, 1963, by Central Medical Society.

YELDELL, JAMES BURL, JR., Greenville. Born Newport News, Va., Nov. 5, 1920; M.D., Meharry Medical College, Nashville, Tenn., 1959; interned Hubbard Hospital, Nashville, Tenn., one year; elected to scientific membership April 10, 1963, by Delta Medical Society.

PERSONALS

CHARLES H. ALLEN has opened practice in Mendenhall. A native of Pinola, Dr. Allen was the first student to receive a medical degree from the University of Mississippi School of Medicine. He has practiced in Hattiesburg since March 1963.



"In your language you'll have to cut down on the Espresso, man, stop popping the bongos, and spend more time on the pad!"

JOHN T. FRAZIER has closed his practice in Columbus to begin a residency in dermatology at the University of Alabama Medical School.

D. W. HAMRICK of Corinth was elected secretary-treasurer of the Tombigbee River Valley Management District at the organizational meeting. The newly-elected officers along with the District directors will spearhead a proposed $50,000,000 project of Tombigbee River and tributaries flood control to be financed by federal, state, and county funds. The project will affect a 19 county area.

S. S. KETY has been named Picayune's "Citizen of the Year" for 1962. The award was made at the 19th annual presentation banquet given by the Picayune Joint Civic Club Council.

WILLIAM E. LOTTERHOS of Jackson moved up from president-elect to president of the Medical Alumni Chapter, Ole Miss Alumni Association at the May annual meeting. He succeeds Dr. Howard A. Nelson of Greenwood.

CLIFFORD TILLMAN of Natchez has been elected a Fellow of the American College of Physicians.

THOMAS PURSER WOOD has announced his plans to close his practice in McComb in order to enter a residency in pathology at Ochsner Foundation Hospital in New Orleans.

DAVID W. YOUNG has joined the Street Clinic and Mercy Hospital-Street Memorial in the Department of General Surgery. A graduate of the University of Texas, Southwestern Medical School, Dr. Young interned at the University Hospital in Jackson. He did general practice in Hazlehurst prior to beginning a tour of duty with the United States Air Force. After completion of his service, Dr. Young entered a surgery residency at Baptist Memorial Hospital in Memphis.

State Morbidity Reported Through May 17

The Mississippi State Board of Health reports the following occurrence of morbidity for 1963 through the 20th week of the year, ending May 17, 1963. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	322
Tuberculosis, O.F.	11
Encephalitis, infectious	6
Salmonella infections	9
Dysentery	
Bacillary	18
Amebic	7
Food Poisoning, NOS	21
Diarrhea of Newborn	1
Septicemia, Staph.	27
Meningococcus infection	
Meningitis	15
Meningococcemia	1
Meningitis, O.F.	23
Tularemia	2
Mononucleosis, infectious	64
Hepatitis, infectious	312
Helminthic infections	
Hookworm	494
Ascariasis	127
Strongyloides	15
Rheumatic Fever	3
Histoplasmosis	1
Streptococcus infections	
Scarlet fever	177
Strep throat	1,320
Pertussis	47
Measles	553
Chickenpox	877
Tetanus	1
Mumps	481
Other complications of smallpox vaccination	3
Influenza	32,099
Gonorrhea	1,881
Syphilis	
Early	154
Late	71

W. B. Saunders Announces Recent Editions

W. B. Saunders Company features the following new editions in their full page advertisement appearing elsewhere in this issue:

BEESON and McDERMOTT—CECIL-LOEB TEXTBOOK OF MEDICINE
The new (11th) edition of a world-famous text, with contributions by 173 noted authorities and details of over 800 diseases

ANDREWS and DOMONKOS—DISEASES OF THE SKIN
A thorough revision of a classic text offering sound advice in dermatologic diagnosis and treatment

AEGERTER and KIRKPATRICK—ORTHOPEDIC DISESASES
An up-to-the-minute book to aid you in the accurate diagnosis of bone disease

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Meeting, June 16-20, 1963, Atlantic City, N. J. F. J. L. Blasingame, executive vice president, 535 N. Dearborn, Chicago 10, Ill.

American College of Surgeons, Oct. 28-Nov. 1, 1963, San Francisco. Samuel P. Harbison, Secretary, 40 East Erie, Chicago 11, Ill.

Southern Medical Association, Nov. 18-21, 1963, New Orleans, La. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham 5, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 11-14, 1964, Jackson. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Mississippi Academy of General Practice, Sept. 25-26, 1963, Jackson. Miss Louise Lacey, Executive Secretary, P.O. Box 1435, Jackson, Miss.

Amite-Wilkinson Counties Medical Society, First Tuesday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday Monthly, 6:30 p.m., Robert E. Lee Hotel, Jackson. Jim G. Hendrick, 800 Carlisle St., Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday March and First Wednesday November, 2:00 p.m., Clarksdale. Whitman B. Johnson, Jr., 422 McWilliams Building, Clarksdale, Secretary.

Coast Counties Medical Society, Second Wednesday, January, First Wednesday, March, May, July, September, November. Charles N. Floyd, 1619-23rd Ave., Gulfport, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. Robert M. Graham, 612 Dixie Towers, Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March and September. Robert B. Townes, Jr., 1196 Mound St., Grenada, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. Thomas W. Wesson, 420 Magazine, Tupelo, Secretary.

North Mississippi Medical Society, First Thursday April and October, Oxford. Marcus E. Morrison, 512 Van Buren Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucien Olen Crosby Memorial Hospital, Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. James C. Bass, Jr., 424-13th Ave., Laurel, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Tom H. Mitchell, The Street Clinic, Vicksburg, Secretary.

Dr. Simmons Named President-elect, Dr. Archer Elevated to Presidency in Closing Meeting of House

As MSMA's House of Delegates closed the 95th Annual Session Thursday, May 16, Dr. Omar Simmons of Newton was named president-elect, and Dr. John G. Archer of Greenville was inaugurated president.



Dr. John G. Archer, right, new MSMA president, accepts the gavel from Dr. C. P. Crenshaw, immediate past president, while Dr. Omar Simmons, president-elect, looks on.

Dr. Archer, who served on the Board of Trustees for six years prior to being named president-elect, succeeded Dr. C. P. Crenshaw of Collins.

In its opening session on Monday, May 13, the House heard Dr. Crenshaw give his President's Address by long distance telephone hook-up from Collins. Dr. Crenshaw, who had suffered a pulmonary embolism a week before the opening of the Annual Session, was confined to bed until Wednesday. The House also heard the introduction of resolutions and reports of officers and councils during its initial meeting.

Besides the election of officers, the Thursday agenda of the House included a talk on "The Fedicare Folly" by Dr. George M. Fister, president of the American Medical Association, and delegate action on the reports of seven reference committees.

Vice presidents named in the Thursday elections were Dr. Byron Mayo of Drew, northern area; Dr. Clyde A. Watkins of Sanatorium, midstate area, and Dr. James T. Thompson of Moss Point, southern area.

Other physicians named to office included Dr. W. Moncure Dabney of Crystal Springs, editor; Dr. DeWitt Hamrick of Corinth, associate editor; Dr. J. P. Culpepper, Jr., of Hattiesburg, delegate to AMA, and Dr. B. B. O'Mara of Biloxi, alternate delegate to AMA.

Reelected to the Board of Trustees were Dr. W. E. Moak of Richton, District 7; Dr. Everett H. Crawford of Tylertown, District 8; Dr. C. D. Taylor, Jr., of Pass Christian, District 9.

Physicians named to councils included Dr. George D. Purvis of Jackson, Council on Budget and Finance; Dr. Temple Ainsworth of Jackson, Council on Medical Education; Dr. E. LeRoy Wilkins of Clarksdale, Council on Constitution and By-Laws; Dr. W. E. Lotterhos of Jackson,



Newly elected MSMA vice presidents are, left to right, Dr. Byron Mayo, Dr. Clyde A. Watkins, and Dr. James T. Thompson.

Dr. Andrew J. Carroll of Hattiesburg, Dr. A. V. Beacham of Magnolia, Dr. Eldon L. Bolton of Biloxi, Council on Legislation; Dr. Paul Brumby of Lexington, Dr. George H. Martin of Vicksburg, Dr. Omar Simmons of Newton, Judicial Council; Dr. George F. Archer of Greenville, Dr. Joseph B. Rogers of Oxford, Dr. M. Q. Ewing of Amory, Council on Medical Service.

Named to the Board of Directors, Mississippi Hospital and Medical Service were Drs. Lamar Arrington of Meridian; Walter H. Simmons of Jackson; W. N. Crowson of Clarksdale, and Andrew K. Martinolich, Jr., of Bay St. Louis.

Nominees to the Mississippi State Board of Health include Drs. N. C. House of Batesville; Ashford Little of Oxford; B. S. Guyton of Oxford; Joseph L. Guyton of Pontotoc; Thomas N. Braddock, Jr., of West Point; S. Lamar Bailey of Kosciusko; Lamar Arrington of Meridian; Guy T. Vise of Meridian; Joe S. Covington of Meridian.

Fraternal delegates will be Dr. W. T. Oakes of Amory, to Alabama; Dr. C. G. Sutherland of Jackson, to Arkansas; Dr. Victor E. Landry of Lucedale, to Louisiana, and Dr. Stanley A. Hill of Corinth, to Tennessee.

In his address before the House, AMA President Fister told the delegates that "freedom is more than a word. And it is only one step or one day or one year or one generation away from destruction—if there are not those who would defend it, speak up for it, fight for it, lose everything for it, and even die for it," he said.

"As you well know," continued the Ogden, Utah, urologist, "The implications of the current King-Anderson legislation are of the deepest concern to all Americans, not just to physicians or the health professions. The outcome of this legislative battle will have profound effects on the quality of medical care available to all Americans in the future," he said.

"The basic issue in the controversy," summed up Dr. Fister, "is not health care for the aged versus no health care at all if the King-Anderson bill does not pass. The basic issue is how shall the care be provided—shall the program be compulsory or voluntary, shall added taxes be levied on wage-earners and employers to provide government benefits indiscriminately to a vast segment of the population, shall medicine be permitted to grow and flourish in freedom, or shall it be stunted and shriveled by the excesses of government control?" he concluded.

The AMA president challenged the MSMA delegates to see that the facts about the King-Anderson controversy are told and that pertinent information concerning the Kerr-Mills program is distributed.

In line with Dr. Fister's address, the House approved a recommendation that proposed bills on federal medical care for the aged be termed "fedicare" rather than "Medicare." The recommendation noted that Medicare is a program for dependents of armed services personnel. Thus, it stated, the use of the term by proponents of the King-Anderson and other like bills is erroneous. The delegates voted to send copies of the recommendation to all state congressmen and senators.

In other action, the House

—instructed the Council on Medical Service and the Council on Medical Education to investigate the possibility of installing teaching programs in the state's four charity hospitals.

—asked the Council on Legislation to make necessary studies toward proposing an amendment to the Mississippi Medical Practice Act making internship a prerequisite to medical licensure.

—adopted an Interprofessional Code for Mississippi Physicians and Attorneys.

—voted to organize a Mississippi Medical Political Action Committee, directing, however, that the committee be totally separate from MSMA.

—recommended that the Mississippi State Board of Health transmit information on loss of narcotics stamps to hospitals, component medical societies, and pharmacists on condition that the Bureau of Narcotics, U. S. Treasury Department, approves such transmittal.

—expressed reservations with respect to area-wide hospital planning and withheld its approval of this concept.

—voted to seek appropriate legislation to restrict the use of radiological machines and medicines for diagnostic and treatment use for human beings to doctors of medicine, doctors of dentistry, qualified technicians, and others qualified by Mississippi law.

—voted to man a first aid station to provide emergency medical care for the state legislature.

—provided for the formation of a Committee on Medicine and Religion.

Earlier, in its Monday session, the House of Delegates voted to dedicate the 95th Annual Session to President Crenshaw. From his home over 100 miles away in Collins, Dr. Crenshaw read his President's Address to the delegates over a long distance hook-up provided by the Southern Bell Telephone Company.

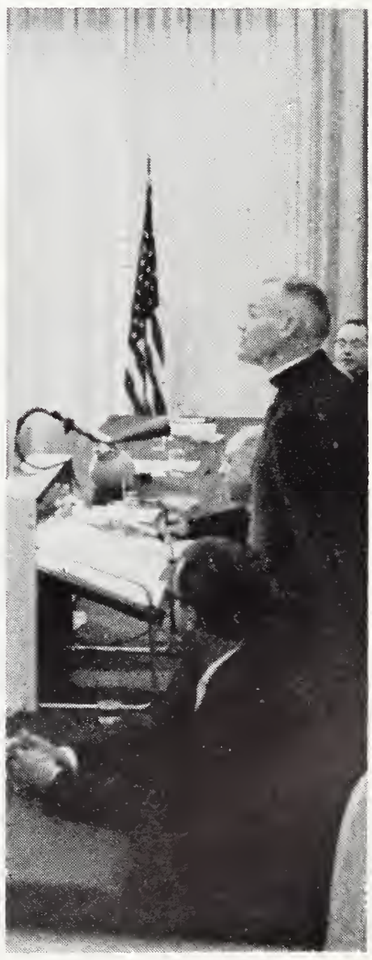
Dr. Crenshaw told his fellow practitioners, "The question before us in socioeconomic terms is not merely what system of medical care the

[*Turn to page 269*]



MEDICINE AND RELIGION sounded the keynote as MSMA's 95th Annual Session convened May 13-16 at the Buena Vista Hotel, Biloxi. Above, physicians and their wives, clergymen of varied faiths, Catholic sisters, and other guests gather in the Lotus Room for the Seminar on Medicine and Religion. Below left are the five principal speakers (left to right), Rev. Dr. Varley, Rev. Dr. McCleave, Dr. Feibelman, Bishop Brunini, and Dr. Rouse. Below right, the Rev. Dr. McCleave brings home a point flanked on the left by Dr. Howard A. Nelson, who presided over the Seminar, and on the right by Bishop Brunini and Rev. Dr. Varley.









THE HOUSE OF DELEGATES during its 95th Annual Session considered an impressive agenda of over 40 reports and resolutions, elected new association officers, and heard addresses by both MSMA and AMA presidents. Top left, Dr. C. P. Crenshaw, MSMA president, speaks to the delegates from his home in Collins. Confined to bed following a pulmonary embolism, Dr. Crenshaw was absent from the Annual Session until Wednesday. Top right, MSMA Executive Secretary Rowland Kennedy watches as Southern Bell engineers Arthur McCaleb, left, and James A. Mixon, both of Biloxi, install the long distance address system used by Dr. Crenshaw. Bottom left are three AMA officers who attended the MSMA sessions, Dr. J. P. Culpepper, Jr., vice president (left); George M. Fister, president (center), and Milford O. Rouse, vice speaker, House of Delegates (right). Below right is a shot of the MSMA House hard at work.









THE NUMBER OF TV DOCTORS running on WLOX-TV, Biloxi, tripled during the week of MSMA's Annual Session. The "Just Coasting" series, a daily interview program conducted by Miss Betty Dees and Mrs. Owen Munro, featured Annual Session participants in two of its segments. In the top photo Dr. H. H. McClanahan, Jr., Dr. John G. Archer, and Dr. Curtis Artz talk with Mrs. Munro. Dr. C. G. Sutherland, Dr. George M. Fister, and Mrs. Munro are on camera in the second picture. Twelve of MSMA's newly elected section officers are shown at the bottom of the page. From the left they are Drs. Ward and Mangold, Pediatrics; Minkler and Bane, GP; Butler and Kitchings, Ob-Gyn; Field and Bush, Surgery; Herring and Murry, EENT; and Smith and Hudson, Medicine.





MSMA'S PAST PRESIDENTS, above, met for their traditional breakfast during the Annual Session with Dr. Lawrence W. Long, 1961-62 president, as host. Eighteen out of the 22 living past presidents attended and were presented with certificates of achievement by Dr. Long in a special ceremony.



Members of the Fifty Year Club, left, met for luncheon on May 14. The group included Dr. and Mrs. Benton Z. Welch, right, who were married 56 years before on May 14, 1907, one week after Dr. Welch was graduated from Tulane University School of Medicine.



United States shall have—it is also what sort of economy shall our nation adopt." "The direction of government, the growing areas of federal responsibility, and the erosion of local autonomy are plainly suggestive of what we may expect," he said.

The MSMA president traced the growth of socialism in Europe and discussed the efforts to bring compulsory federal medical care to the United States.

He concluded, "The fiber and fabric of our free choice system has been and is on trial. We are challenged to extend and improve medical care, not because of inequities but because of the profession's aspirations for a more perfectly healthy nation. And we are challenged to prepare ourselves for greater service in greater depth as a state medical association."

The House of Delegates was presided over by Dr. B. B. O'Mara of Biloxi, speaker, and Dr. Howard A. Nelson of Greenwood, vice speaker. The House was opened on Monday, May 13, for its 95th Annual Session by Dr. Crenshaw and closed on Thursday, May 16, by Dr. Archer.

Seminar Is Scientific Summit of 95th

Opening the May 15 Seminar on Medicine and Religion, scientific summit of MSMA's 95th Annual Session, Dr. C. P. Crenshaw said, "Nearly every physician reared and trained within the sphere of Judeo-Christian influence believes that the mission of healing is at least righteous, if not divinely inspired."

The MSMA president, who gave his May 13 address to the House of Delegates by phone from his home in Collins because of personal illness, arrived in Biloxi in time to keynote the precedent-setting Seminar. More than 500 physicians and guests were gathered in the Lotus Room of the Buena Vista Hotel to hear the Seminar participants.

Dr. Crenshaw went on to tell the Seminar audience that "just as General Eisenhower said during World War II that 'there are few atheists in the fox holes . . .' so may it also be said that there are few in the operating suite and at the side of the hospital "bed."

"We have good reason to address ourselves to the pertinent matter of medicine and religion and the interrelationship which makes it difficult to say where one begins and the other ends," concluded Dr. Crenshaw. Following Dr. Crenshaw's remarks, four nationally known clergymen and a physician church leader addressed the half-day meeting.

Dr. Milford O. Rouse of Dallas, Texas, chairman of the AMA Committee on Medicine and Religion, told the Seminar audience, "Any physician who has studied with an open mind the wonderful construction of the human body and the unmistakable evidence of the relationship of spiritual and mental factors on its function comes to the inevitable conclusion that a Supreme Power and design is behind this "world."

"In recent decades," the Baptist layman continued, "there has been a tragic tide toward the subjugation of the rights of the individual to the ever encompassing encroachment of central authority or power. The medical profession in the United States is one profession that has remained a bulwark in opposing this trend toward centralization of power," he said.

Speaking to the doctors in the audience, Dr. Rouse warned that the medical profesion has a great responsibility to physicians of the future. "It is more than ever imperative that we maintain examples of spiritual and personal integrity," he said.

Concluding his remarks, Dr. Rouse observed, "We need not less of the science of medicine but more of the art, and a large measure of the art lies in the spiritual capacity of individual physicians."

The Most Rev. Joseph B. Brunini of Jackson, auxiliary bishop, Diocese of Natchez-Jackson, followed Dr. Rouse on the Seminar program. In his opening remarks he told the Seminar audience, "We badly need to communicate with each other. We do not yet know our neighbors, but we are exploring into space. We must not forget the innermost man about whom we know so little."

Bishop Brunini observed that one distressing phenomenon of American culture is that "we do not know each other's beliefs." He recommended the implementation of similar panel discussions at county level.

The Catholic leader also cautioned the state physicians that they must resist the temptation to be theologians and observed that conversely the priest, minister, and rabbi should not attempt to play doctor. He challenged the physicians as highly trained and educated men to participate not only in the medical problems of their cities but also in every phase of civic life.

Dr. Julian B. Feibelman, of New Orleans, rabbi, Temple Sinai, discussed the age-old conflict between religion and science and the resolution of the conflict that has come about in recent decades.

"The strain between our groups is over," the rabbi told the physicians. "The bond of cooperation grows stronger as we understand this principle: Science without religion can be destructive; religion without science can become superstition," he said.

Ministers were once chided, he continued, because they spoke of the soul or spirit as a part of the body. The old technician scoffed at the soul, saying that in years of dissection he never discovered one, Dr. Feibleman said. Every scientist today admits he has a mind, but no one has ever anatomized it, the Jewish leader noted.

"We cannot locate the mind, nor consciousness, conscience, nor obsession, nor guilt, sin, nor complex," Dr. Feibelman said, "and no one ever saw an atom, yet we live in the atomic age." He noted that often the so-called unreal is the realest of all reality and observed, "Life would have grown extinct eons since without the persistent thrust toward things unseen and unknown."

Dr. Feibelman brought his comments to a close with a discussion of Judaism's teachings on health.

A Maryland clergyman, Dr. Robert P. Varley of Salisbury, rector of Salisbury Parish, told the Seminar that there are cultural cancers far more deadly to society than carcinoma of the body. Medicine's ministry and religion's responsibility is for these also, he said.

The Episcopal leader listed the familiarization of each discipline with the basic concerns of the other as the first task facing the alliance of medicine and religion. Secondly, he said, social and economic factors affecting man should be discussed in these forums, based on medicine's investigation of the socioeconomic factors facing man.

"Medicine must continue with its programs of research into organic and psycho-pathology," he said, "and religion must continue to investigate theological and philosophical forces affecting time and eternity. But neither of us can continue to long ignore the socioeconomic cancer ravaging the productive adequacy of our fellow man," Dr. Varley concluded.

The Rev. Dr. Paul B. McCleave, director, Department of Medicine and Religion, American Medical Association, brought the Seminar on Medicine and Religion to a close.

"Every man has a faith and he must be treated and cared for within that faith," said the Presbyterian clergyman. He noted that the AMA Department of Medicine and Religion was founded on this precept and said that the department's purpose was to bring together physicians and clergymen of all faiths to discuss the areas of need in their local communities.

To date, he reported, leaders of 15 major faiths and leading physicians in nine selected states have been consulted for advice and guidance in charting the course of the department's work. During 1962, he continued, a group of 20 county medical societies were selected in which pilot programs bringing together physicians and clergymen were conducted and evaluated. On the basis of these programs, Dr. McCleve said, the AMA department is now prepared to present to the nation's 1,940 county medical societies, through the state societies, program ideas and suggestions.

The AMA official said that each state medical association has been asked to organize a Committee on Medicine and Religion. These state committees, he said, will work with the county medical societies in bringing together local physicians and clergymen for the discussion of community problems.

During its Thursday, May 16 meeting, MSMA's House of Delegates directed the Board of Trustees to appoint an *ad hoc* Committee on Medicine and Religion. Looking toward more permanent organization of the committee, the House voted to hold for approval at the 96th Annual Session an amendment to the by-laws providing for a permanent Committee on Medicine and Religion.

Dr. Howard A. Nelson of Greenwood, MSMA past president and vice speaker of the House of Delegates, presided over the Seminar on Medicine and Religion. A luncheon was held honoring the Seminar participants following the half-day meeting.

Chest Physicians Name Dr. Webb President

Dr. Watts R. Webb of Jackson has been named president of the Mississippi Chapter, American College of Chest Physicians. He succeeds Dr. Guy D. Campbell, also of Jackson.

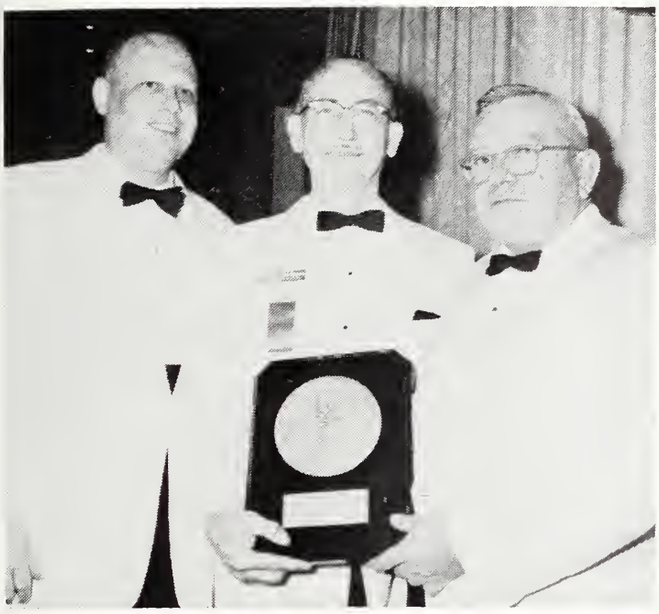
Other officers are Dr. Jesse L. Wofford of Jackson, vice president and Dr. Thomas K. Williams of Jackson, secretary-treasurer.

The next meeting of the chapter will be in the fall at Sanitorium.

Five Physicians Receive MSMA Awards

MSMA's two top awards were presented to five state physicians during the annual banquet May 15.

Dr. Frank Davis of Corinth was the recipient of the Robins plaque for community service and Drs. J. Harold Conn, William R. Fain, James D. Hardy, and Rush E. Netterville, all of Jackson, captured the scientific achievement award for their exhibit on "Thoracic Trauma."



The second annual Robins Award went to Dr. Frank A. Davis of Corinth, center, during the annual MSMA banquet. At the left is Willard L. Duval, area manager for the A. H. Robins Company, and Dr. H. H. McClanahan, who made the presentation.

The Robins Award, given this year for the second time, recognizes distinguished and outstanding community service. It is given annually by MSMA in conjunction with the A. H. Robins Company.

Dr. Davis was chosen from a field of six nominees by a Board of Judges composed of MSMA's three vice presidents. Other nominees were Drs. Verner S. Holmes of McComb, Walter E. Johnston of Vicksburg, Charles M. Murry of Oxford, and Howard A. Nelson of Greenwood. Nominations are made by the component medical societies.

A graduate of Vanderbilt University Medical School, Dr. Davis served on the committee that organized the Corinth National Bank of Commerce and is a past member of the Board of Trustees of Blue Mountain College. He is currently serving on the Advisory Committee to the college. Dr. Davis has served on the Board of Trustees of the Crippled Adults Hospital at Memphis and is a lifetime Deacon of his church and a 32nd degree Mason.

The Corinth physician has served as a director of the Corinth Boys Club; the Chamber of Commerce, the Y.M.C.A., and the local chapter of the American Red Cross. He has worked with the American Cancer Society, the Heart Fund of Alcorn County, the Selective Service Board, the Department of Public Welfare, and a state committee studying psychiatric needs for emotionally disturbed children.

Dr. Davis has also been a leader in medical circles serving in various elective positions of his county medical society and as a vice president of the Mississippi State Medical association.

The 1962 winner of the Robins Award was Dr. Thomas G. Ross of Jackson.

This year for the first time the winners of the scientific achievement award were presented with a mounted sculptured medallion struck in bronze. Up to the 1963 presentation, the award had been a gold medal.

In making the presentation to Drs. Conn, Fain, Hardy, and Netterville, Dr. C. G. Sutherland, chairman of the Council on Scientific Assembly, said, "The heart of any medical meeting is its scientific exhibits. A carefully prepared presenta-



Dr. C. G. Sutherland, left, and Dr. James D. Hardy admire the scientific achievement award which Dr. Hardy accepted for the winning exhibit, "Thoracic Trauma." Other authors of the exhibit, which won out over a field of ten, were Drs. J. Harold Conn, William R. Fain, and Rush E. Netterville, all of Jackson.

tion conveys an essay of thousands of words in moments. The Council on Scientific Assembly attaches great significance to these presentations and has encouraged Mississippi physicians to report their investigations through exhibits."

The winning exhibit, "Thoracic Trauma," competed with nine other scientific exhibits for the award.

Pathologists Name Dr. Schiesari President-elect

Meeting concurrently with MSMA's 95th Annual Session, the Mississippi Association of Pathologists named Dr. Louis Schiesari of Jackson president-elect.

Dr. Elizabeth Ferrington of Jackson was inaugurated president during the May 13 session. She succeeds Dr. Robert S. Cooke of Hattiesburg.

Dr. William P. Featherston of Jackson was reelected secretary and councilor to the American Society of Clinical Pathologists. Dr. Richard H. Fenstermacher of Vicksburg was named assemblyman to the College of American Pathologists.

During its annual business meeting, the association presented Dr. H. C. Ricks, Sr., of Jackson, retired director of laboratories, State Board of Health, with a certificate of emeritus membership.



Dr. Robert S. Cooke of Hattiesburg, left, presents Dr. H. C. Ricks, Sr., with a certificate of emeritus membership in the Mississippi Association of Pathologists.

Scientific Sections Name 1963-64 Officers

Fourteen new section officers were named to head MSMA's seven scientific sections during the 95th Annual Session held May 13-16 in Biloxi.

Directing the work of the Section on Medicine for the 96th Annual Session will be Dr. J. Manning Hudson of Jackson, chairman, and Dr. A. B. Smith of Meridian, secretary.

Dr. Eugene A. Bush, Sr., of Laurel was named chairman of the Section on Surgery, and Dr. Richard J. Field, Jr., of Centreville was elected secretary. The Section on Preventive Medicine chose Dr. Reggie Bourret of Meridian as chairman and Dr. Alton B. Cobb of Jackson as secretary.

Other sections and their officers include the Section on Pediatrics—Dr. Mary Ward of Corinth, chairman; Dr. Maria J. Mangold of Yazoo City, secretary; Section on Obstetrics and Gynecology—Dr. Frank L. Butler, Jr., of McComb, chairman; Dr. John T. Kitchings of Jackson, secretary; Section on Eye, Ear, Nose, and Throat—Dr. Charles M. Murry, Jr., of Oxford, chairman; Dr. Emmett M. Herring, Jr., of Hattiesburg, secretary; Section on General Practice—Dr. J. Roy Bane of Jackson, chairman; Dr. Frederick C. Minkler, Jr., of Pascagoula, secretary.

Medicare Will Serve NATO Dependents

Dependent spouses and children of military personnel of North Atlantic Treaty Organization nations stationed in the United States will be eligible for services under the original Medicare program effective July 1. This was the announcement of Brig. Gen. Bryan C. T. Fenton, executive director of the Office for Dependents' Medical Care, Washington.

NATO personnel dependents will be furnished the standard identification card, DD Form 1173, and will be entitled to apply for and receive the same services as are available to dependents of U. S. uniformed services personnel, the announcement continued. Physicians who render care to such dependents are asked to follow usual procedures in completing the claim. Through special arrangements with the Department of Defense, NATO nations will reimburse the United States government.

NATO nations are, in addition to the United States, Belgium, Canada, Denmark, France, Great

Britain, Greece, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Turkey, and West Germany.

Education Program Planned On Respiratory Disease

On May 1 the Mississippi Tuberculosis Association and its 87 affiliated county and bi-county associations began an extensive public education campaign devoted to alerting the public about the early symptoms of respiratory disease.

This educational effort is being coordinated with other state organizations and the parent body, the National Tuberculosis Association. This effort has been approved by the association's medical section, the Mississippi Thoracic Society.

The theme of this educational effort is the two questions, "Cough Too Much?—Short of Breath??". All posters, radio, and television materials are following through from the two leading questions with the statements, "You may have a respiratory disease. Don't take chances. See your doctor."

All physicians in Mississippi were informed of this educational effort in advance and were provided with a handy booklet entitled "Chronic Cough or Shortness of Breath—Differential Diagnosis." This booklet was specially prepared for the practicing physician and was developed by the American Thoracic Society, the medical section of the National Tuberculosis Association.

Several other special projects are being carried on in conjunction with the public educational effort by the Mississippi Tuberculosis Association. A survey of all hospitals in the state is being made to determine the availability of pulmonary function testing equipment. The information obtained from this survey will be prepared in booklet form and distributed to all interested persons. A special committee is also working on the development of teaching units and planning workshops for school students and teachers on the effects of smoking and its relationship to respiratory disease. This project will be a joint venture with other voluntary and official agencies interested in the increasing incidence of respiratory disease and conditions due to excessive smoking.

Any Mississippi physician interested in further information about the respiratory disease educational effort may contact the Mississippi Tuberculosis Association, P. O. Box 9865, Northside Station, Jackson 6, Miss.

Dr. Barnett Appointed To Hospital Commission



Dr. William O. Barnett of Jackson, second from right, standing, was sworn in as a member of the Mississippi Commission on Hospital Care at the commission's May 13 meeting. Commission members standing are Dr. Lee R. Murphree, Aberdeen; Dr. A. L. Gray, Jackson; Dr. Barnett; Dr. Omar Simmons, Newton. Seated are Dr. Stanley A. Hill, Corinth; Dr. W. H. Anderson, Booneville; Lester Tuck, Pascagoula.

AMA To Publish Medical Film Catalog

The American Medical Association has announced the publication of an indexed catalog listing more than 4,000 medical motion pictures, covering every aspect of medicine and its allied arts. Expected release date of the catalog is late 1963.

Motion pictures are a highly important tool in the training of graduate physicians, students, nurses and all others concerned with the healing arts.

Ralph P. Creer, director of medical motion pictures and television for AMA, said the new catalog will list each film with a brief summary, running time, names of authors and producers, and address of the primary rental source. Evaluations will be included with many of these films.

Publication format was established by a discussion between representatives of AMA, the American College of Surgeons, the International College of Surgeons, the Association of American Medical Colleges, the American Hospital Association, the American Dental Association, the United States Veterans Administration, E. R. Squibb and Sons, and Smith Kline and French Laboratories.

Delta Council Committee Opposes King-Anderson Bill

Members of the Delta Council Health Committee, meeting in Greenville recently expressed "unalterable" opposition to the King-Anderson bills and all similar and related measures. The committee called upon the Mississippi congressional delegation to exercise its influence in bringing about defeat of this legislation.

At the same time the committee, headed by Wade W. Hollowell of Greenville, reaffirmed faith and confidence in private medicine and voluntary financing of medical care.

The agenda for the meeting also included discussions of the charity program in Mississippi, nursing homes and convalescent care and implementation of the Kerr-Mills program.

Members of the committee expressed belief that the American system of privately purveyed, voluntarily and privately financed medical care is "infinitely superior to any system controlled by government" and that the enactment of proposed legislation would "fail to achieve the goals claimed by its proponents while increasing the tax burden upon every working American."

"Such a law would socialize American medicine and disrupt the cash-benefit concept inherent in the Social Security system," a statement adopted by the committee said.

"Still another concern in this connection is the enormity of the tax burden associated with the bills," the committee statement continued. "Social Security tax alone would be fixed at 9.75 per cent on a wage base of $5,200 by 1968. In the first year, this bill would cause a tax increase upon Mississippi employers and workers of $7 million. In 1961, Mississippi wage earners paid $58.2 million in Social Security taxes. Enactment of this measure would raise such taxes to at least $85.2 million in less than five years."

Chest Physicians Plan 29th Annual Meeting

The American College of Chest Physicians will hold its five-day annual meeting at the Ambassador Hotel, Atlantic City, June 13-17 this year. Dr. John F. Briggs, St. Paul, Minn., president of the College, will preside.

The program committee, under the chairmanship of Dr. William E. Adams, Chicago, has prepared a comprehensive scientific program. This will include postgraduate seminars, open forums, a cine symposium, round table luncheon sessions, formal papers, and motion pictures.

The opening session on Saturday morning, June 15, will be a symposium on "The Relationship of Autoimmunity to Cardiopulmonary Disease."

The American Medical Association and the American College of Chest Physicians will hold a combined meeting at the Convention Hall on Monday, June 17. In addition to the regular scientific sessions, there will be six Round Table Luncheon sessions.

Once again, the American College of Chest Physicians' always popular "Fireside Conferences" will be a part of the combined meeting with the AMA, and these will be held Monday evening, June 17, at the Ambassador Hotel.

Additional information may be obtained by writing Murray Kornfeld, Executive Director, American College of Chest Physicians, 112 East Chestnut St., Chicago 11, Ill.

WW II Surgeons Meet After 20 Years



Dr. Joseph G. McKinnon of Hattiesburg, left, chairman of the Section on Surgery, introduced a very special speaker to his section during the 95th Annual Session. Dr. McKinnon and Dr. Frederick H. Bowen of Jacksonville, Fla., right, last saw each other in October 1942 in the middle of the Battle of Guadalcanal. Both were surgeons attached to the 1st Marine Division, Fleet Marine Force. They did not see each other again until Dr. Bowen addressed the MSMA Surgical Section. Dr. Bowen spoke on "Post Thrombo-Phlebitic Syndrome."

Consultant Physical Therapist Available to State Doctors

The Chronic Illness Services Division of the Mississippi State Board of Health now has, as a service to physicians throughout the state, a consultant physical therapist.

Miss Juanita I. Woods, a registered physical therapist, is available for consultation for personnel training plus patient care programs in nursing homes. Upon request of the nursing home operator, she will conduct in-service training programs for personnel in bed positioning for patients, maintenance of motion, transfer activities, methods of ambulation, and instruction in simple restorative procedures which can be performed by the nursing home personnel under the written orders of a licensed physician.

Upon request of a physician Miss Woods will assist in setting up a restorative program for a patient to be carried out by the nursing home personnel. If physical therapy treatment on an individual basis by a physical therapist is required for a patient, the consultant will assist in supplying information as to the location of a qualified therapist in the area.

In-service training programs for the public health nurses have been started on preventive measures for disability from strokes and arthritis, consisting of lectures and demonstration of range of motion, bed positioning, and simple exercise programs. These programs will be continued and, upon request of community hospitals, expanded to their personnel.

Dr. Nelson Appointed SMA Councilor

The appointment of Dr. Howard A. Nelson of Greenwood as councilor-elect from Mississippi of the Southern Medical Association has been announced by Dr. Robert D. Moreton of Fort Worth, Texas, president-elect.

Dr. Nelson will be installed as councilor from Mississippi, serving a five-year term, at the close of the forthcoming annual meeting of SMA to be held in New Orleans Nov. 18-21, 1963. At the same meeting, Dr. Moreton will be installed as president by retiring president, Dr. Daniel L. Sexton of St. Louis.

Dr. Guy T. Vise of Meridian is currently serving the final year of his term of office as councilor from Mississippi.

Dr. Archer to Head MSMA in 1963-1964

Dr. John G. Archer of Greenville, a member of the MSMA Board of Trustees for six years, was inaugurated association president at the close of the 95th Annual Session held May 13-16 in Biloxi.

Dr. Archer received his B.S. degree in 1912 from Vanderbilt University and his M.D. from the University of Pennsylvania School of Medicine in 1916. He interned at the Episcopal Hospital in Philadelphia, Pa., from 1916 to 1917 and at the Methodist Hospital in Philadelphia from 1919 to 1920. He served in the U. S. Army Medical Corps, Foreign Service, during World War I.



Dr. Archer

The Greenville internist took his postgraduate training at the Physiatric Institute in Morristown, N. J., Cornell University Medical College, Tulane University School of Medicine, and St. Louis School of Medicine, Barnes Hospital. He is now senior partner in the Doctors Gamble Brothers and Archer Clinic.

Dr. Archer is the great, great grandson of John Archer, the first graduate of medicine in America. Dr. John Archer received his degree from the University of Pennsylvania School of Medicine in 1768.

Long a leader in medical organization, Dr. Archer served for a number of years as a member of the MSMA House of Delegates. He is a past president of the Mid-South Postgraduate Medical Assembly, a former vice president from Washington County of Delta Medical Society and a former president of Delta Society. The MSMA president has also held numerous offices in his specialty societies and in state volunteer health organizations.

Following Dr. Archer's inauguration during the closing session of the House of Delegates, Wade W. Hollowell, president of the First National Bank of Greenville, presented the new MSMA president with a gift in recognition of the honor he has brought to his hometown.

State EENT Group Names Dr. Gamble President

Dr. Lyne S. Gamble of Greenville was inaugurated president and Dr. Emmett M. Herring, Jr., of Hattiesburg was named president-elect during the May 15 meeting of the Mississippi EENT Association.

Meeting in Biloxi concurrently with MSMA, the association named Dr. Samuel B. Johnson of Jackson secretary. Dr. Joseph B. Rogers of Oxford is the outgoing president.

AUXILIARY

State Auxiliary Names Mrs. Safley President-elect

Mrs. T. J. Safley of Jackson was installed as president-elect of the Woman's Auxiliary to the Mississippi State Medical Association during the group's 40th Annual Session held May 13-15 in Biloxi at the Buena Vista.

Meeting simultaneously with MSMA, the Woman's Auxiliary inaugurated Mrs. Mal S. Riddell of Winona as president for 1963-64. She succeeds Mrs. A. T. Tatum of Hattiesburg, who moved to the office of first vice president.



Auxiliary presidents are from the left Mrs. A. T. Tatum, immediate past president; Mrs. Mal S. Riddell, 1963-64 president, and Mrs. T. J. Safley, president-elect.

The new officers were installed by Mrs. William G. Thuss of Birmingham, Ala., president of the Woman's Auxiliary to the American Medical Association. Installation services were held during a luncheon at the Broadwater Beach Hotel on Tuesday, May 14.

Other Auxiliary officials include Mrs. H. E. Kellum, Jr., Vicksburg, second vice president; Mrs. J. Gordon Dees, Jackson, third vice president; Mrs. H. H. McClanahan, Jr., Columbus, fourth vice president.

Also, Mrs. Richard L. George, Columbus, recording secretary; Mrs. Byron A. Mayo, Drew, treasurer; Mrs. T. A. Baines, Jackson, historian; Mrs. Arthur A. Derrick, Jr., Durant, corresponding secretary, and Mrs. George W. Owen, Jackson, parliamentarian.

The Auxiliary Annual Session opened officially Tuesday, May 14, with a General Session and closed Wednesday, May 15, with a tea.

In addition to Mrs. Thuss, Mrs. Elias Margo of Oklahoma City, Okla., president of the Southern Medical Auxiliary, was an honored guest for the auxiliary meeting.

Mrs. Riddell Named MSMA Auxiliary President

Mrs. M. S. Riddell of Winona will serve the Woman's Auxiliary to MSMA as president during 1963-64. She succeeds Mrs. A. T. Tatum of Hattiesburg.



Mrs. Riddell

Mrs. Riddell, who has served a number of years as a Board member of the Mississippi State Medical Auxiliary, represented the state organization as a delegate to the American Medical Auxiliary meeting held in June 1962 in Chicago. She attended the September-October Conference for state presidents and president-elects and also the Mental Health Conference in Chicago in October 1962.

As president of the Woman's Auxiliary to MSMA, Mrs. Riddell plans to attend the AMA Auxiliary meeting to be held in Atlantic City in June 1963.

IN DIARRHEAS



Patient: W. O. **Age:** 45 **Sex:** F **Weight** 96

Diagnosis: Functional diarrhea

Results: Definite **Side Effects:** None

Comment: Patient has been on R-1132 (Lomotil) for fifteen months with definite improvement.

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LOMOTIL directly controls the *mechanism* of diarrhea. Therefore, it acts to give symptomatic relief in all diarrheas.

Lomotil promptly arrests acute diarrhea and controls chronic or refractory diarrhea with a high degree of safety.

Pharmacologic considerations indicate that Lomotil acts on the smooth muscle of the intestines and thus lowers the excessive propulsive motility responsible for increased fluidity and frequency of stools. This localized action makes Lomotil unusually free of secondary effects.

By reducing excess propulsive motility, Lomotil assures safe, selective symptomatic control of virtually all diarrheas.

Dosage: For adults the recommended initial dosage is two tablets (2.5 mg. each) three or four times daily. Lomotil maintenance dosage may be as low as two tablets daily.

Lomotil is supplied as unscored, uncoated white tablets of 2.5 mg. and as liquid containing 2.5 mg. in each 5 cc. A subtherapeutic amount of atropine sulfate (0.025 mg.) is added to each tablet and each 5 cc. of the liquid to discourage deliberate overdosage. Recommended dosage schedules should not be exceeded.

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Research in the Service of Medicine

AMA '63 Meet To Discuss Frequent Medical Problems

The latest information on some of the most common problems that confront physicians will be presented at eight general scientific sessions during the annual meeting of the American Medical Association in Atlantic City, June 16-20.

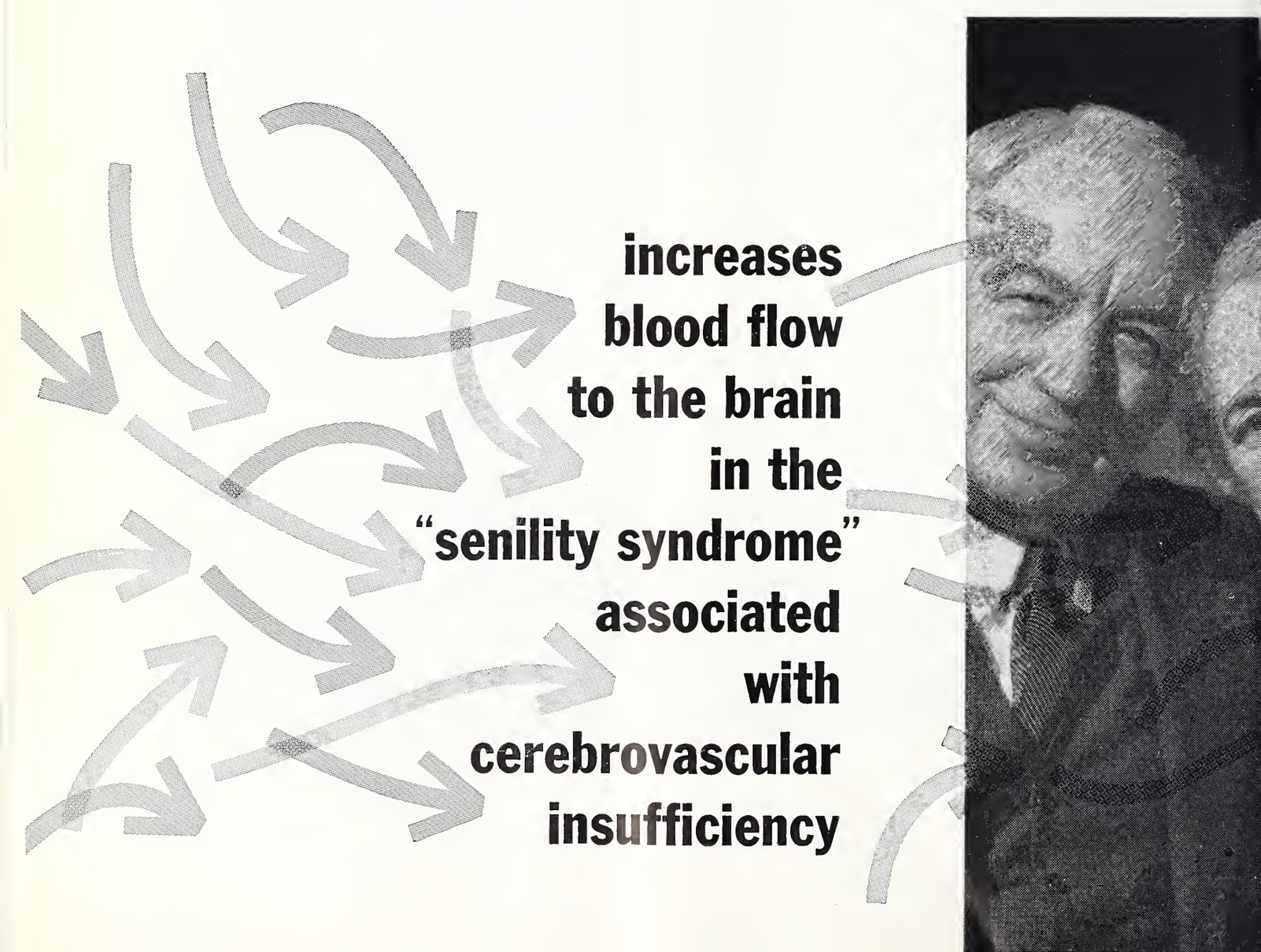
Heart attacks, strokes, cancer, peptic ulcer, heredity, obesity, venereal disease, and painful back will be covered in lectures or panel discussions.

A series of lectures on modern concepts of acute myocardial infarction, including basic physiological and pathological considerations, will be presented by Dr. Jesse E. Edwards, St. Paul, Minn.; Dr. Richard J. Bing, Detroit; Jack W. Crowell, Ph.D., Jackson, Miss.; Dr. Carleton B. Chapman, Dallas; Dr. Franklin D. Johnston, Ann Arbor, Mich., and Dr. Thomas N. James, M.D., Detroit.

A day-long symposium on strokes is scheduled on Wednesday, June 19. Participants include Dr. Louis Sokoloff, Bethesda, Md.; Dr. C. Miller Fisher, Boston; Dr. Clark H. Millikan, Rochester, Minn.; Dr. T. H. Newton, San Francisco; Dr. John Stirling Meyer, Detroit, and Dr. James E. Eckenhoff, Philadelphia. Others are Dr. Ellen McDevitt, New York City; Dr. Edwin J. Wylie, San Francisco; Dr. Donald A. Covalt, New York City; Dr. Roy R. Greening, Philadelphia; Dr. H. L. Baker, Rochester, Minn., and Dr. J. Lawrence Pool, New York City.

The question, "What Drugs for What Cancers by What Doctors?," will be answered by Dr. Donald B. Rochlin, Los Angeles, Dr. Albert Segaloff, New Orleans, Dr. Robert G. Ravdin, Philadelphia, and Dr. Fred J. Ansfield, Madison, Wis., in lectures followed by a panel discussion.

A full day's program will be devoted to a symposium on newer knowledge and therapy of peptic ulcer on Monday, June 17. The 11 speakers are Dr. David State, New York City; Dr. Eldon Foltz, Seattle; Dr. John Campbell, Indianapolis; Dr. James L. A. Roth, Philadelphia; Dr. Joseph B. Kirsner, Chicago; Dr. John Bruce, Edinburgh, Scotland; Dr. Edward R. Woodward, Gainesville, Fla.; Dr. H. William Scott, Jr., Nashville, Tenn.; Dr. Claude E. Welch, Boston; Dr. George A.



Hallenbeck, Rochester, Minn., and Dr. Eugene Bernstein, Minneapolis.

A panel discussion on medical genetics will bring together Dr. David Y. Y. Hsia, Chicago; Dr. Harold F. Falls, Ann Arbor, Mich.; Dr. Maurice T. Fliegelman, Louisville; Dr. E. Burke Evans, Galveston, Texas, and Dr. David C. Fainer, Baltimore.

Various problems associated with the treatment of obesity will be explored by a six-man panel consisting of Dr. Edgar S. Gordon, Madison, Wis.; Eliot Stellar, Ph.D., Philadelphia; Dr. Albert Stunkard, Philadelphia; Dr. Charlotte M. Young, Ithaca, N. Y.; Dr. Garfield G. Duncan, Philadelphia, and Dr. Seymour L. Halpern, New York City.

Participating in a symposium on venereal disease will be Dr. R. H. Kampmeier, Nashville, Tenn.; Dr. M. Brittain Moore, Jr., Atlanta; Dr. Sidney Olansky, Atlanta; Dr. Nicholas J. Fiumara, Boston; Dr. D. B. Stewart, Mona, Jamaica, B. W. I., and Dr. Kyril B. Conger, Philadelphia.

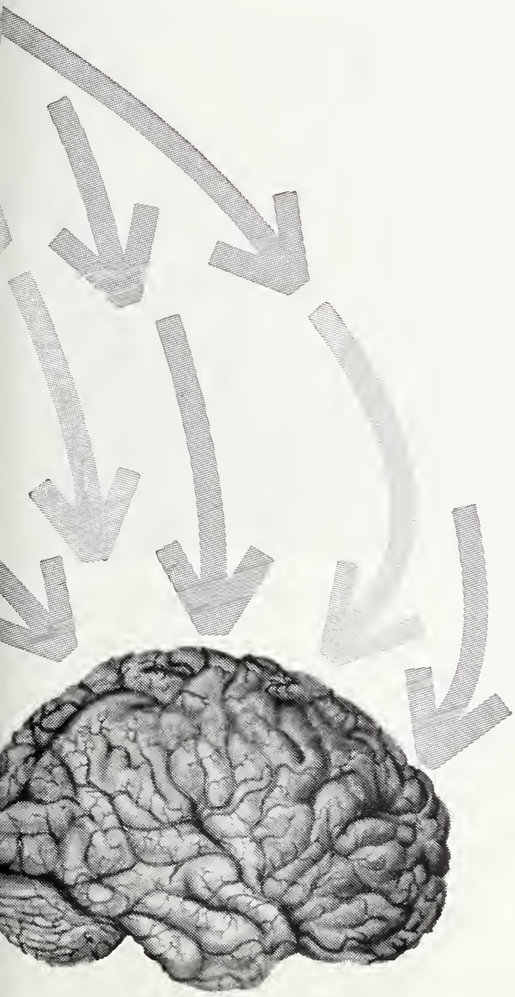
An analysis of the painful back will take the form of a panel discussion among Dr. H. Relton McCarroll, St. Louis; Dr. Allen S. Russek, New York City; Dr. Robert D. Moreton, Fort Worth, Texas, and Dr. Eben Alexander, Winston-Salem, N. C.

Symposium on Plasma Membrane Now Available In Book Form

Proceedings of a Symposium on the Plasma Membrane, held under sponsorship of the New York Heart Association, have been published by the American Heart Association.

Edited by Dr. Alfred P. Fishman, M.D., the symposium brings together knowledge of the workings of the cell boundary and its properties as a regulatory mechanism. New explorations of the plasma membrane by electron microscopy, biochemistry, physical chemistry and electrochemistry are discussed by specialists. The result is a unique summary of where the scientist stands today in understanding this fundamental area and the problems still facing research.

The 250-page paper bound book is available at $2.75 from local Heart Associations or the AHA national office.



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REFERENCES: 1. Madow, L.: Penn. M. J. 62-861, June 1959. 2. Stieglitz, E. J.: Geriatric Medicine, ed. 2, Philadelphia, Saunders, 1949 p. 274. 3. Winsor, T., et al.: Amer. J. Med. Sciences 239:594, May 1960. 4. Eisenberg, S.: ibid, July 1960.

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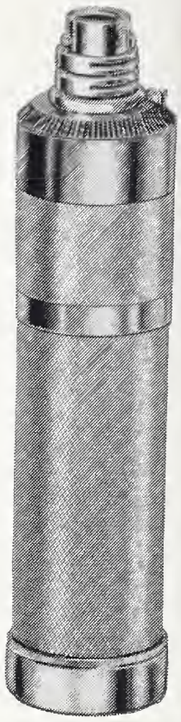
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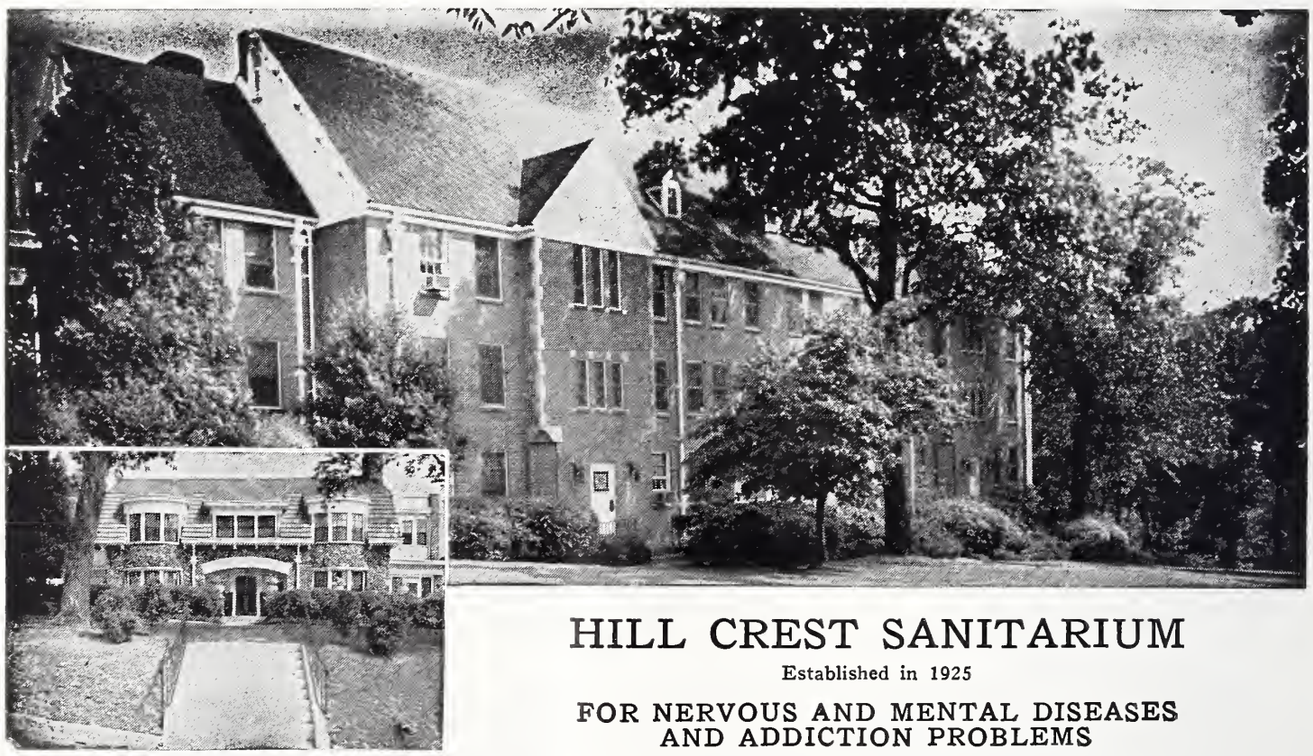
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Manuscripts should be typewritten, double spaced on one side of the paper. Tables, charts, and tabulations should be submitted on separate sheets but their position in the text should be indicated. Authors are encouraged to limit bibliographies to 10 references, written in conformation to style utilized in scientific publications of the American Medical Association. Articles are accepted for publication on the condition that they have not been previously published and are contributed solely to this JOURNAL.

A thesis summary of 75 to 100 words must accompany each manuscript separately from the text. Figures and drawings are acceptable when prepared with black ink on white paper. Photographs for illustrations should be unmounted, untrimmed, glossy prints and all such material must be identified. No charges are made to authors for illustration engravings not exceeding four column inches per printed page.

Reprints may be obtained at cost from the association. The right is reserved to decline any manuscript for publication. Ordinarily, manuscripts submitted will be acknowledged whether published or not.

Dr. Tatum To Head State Internists

Members of the Mississippi Society of Internal Medicine named Dr. Frederick E. Tatum of Hattiesburg president during its May 14 meeting.

Meeting at the Buena Vista Hotel in Biloxi at the same time of MSMA's 95th Annual Session, the Society elected Dr. David J. Van Landingham of Jackson president-elect and Dr. S. H. McDonnieal of Jackson, secretary.

Dr. Tatum succeeds Dr. T. T. Justice, Jr., of Gulfport as president.

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References: 1. A.M.A. Council on Drugs J.A.M.A. 183:469 (Feb. 9) 1963. 2. Gruenberg F.: Curr. Ther. Res. 2:1 (Jan.) 1960.

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Number 7
July 1963

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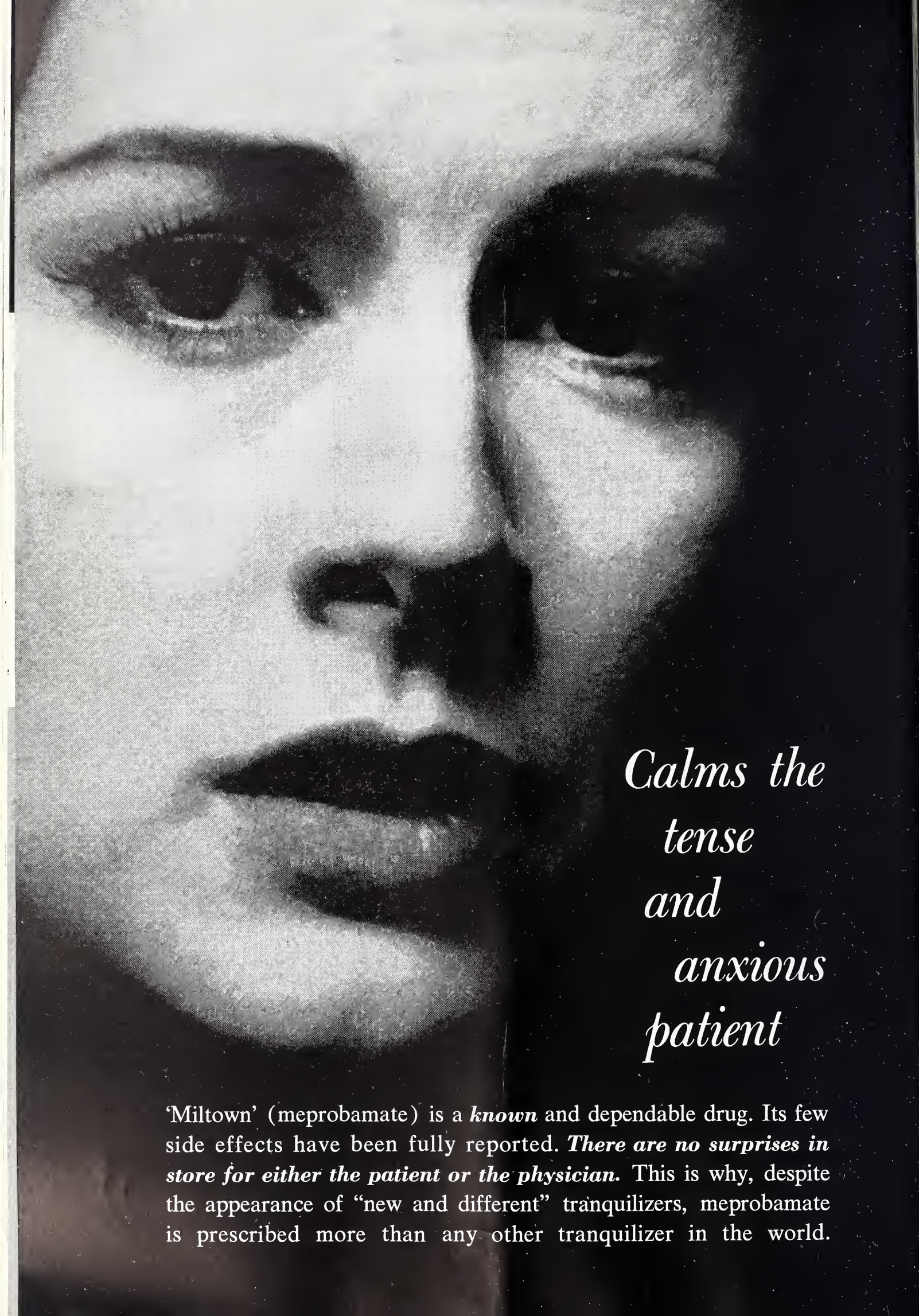
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NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION
JACKSON, MISSISSIPPI

July 1963

Dear Doctor:

The most powerful tax-policy figure in the Congress made his position crystal clear on issues of fedicare and raising Social Security taxes. Rep. Wilbur Mills (D., Ark.), chairman of House Ways and Means Committee, said his bill to increase Social Security tax was to "call attention to the fact that it is not actuarially sound."

> Mills reaffirmed his opposition to fedicare which probably sounds death knell on King-Anderson for present session. Social Security operated in the red five out of past six years, and while Mills would like to put it in the black, he will scuttle his own bill rather than let it become a vehicle for enactment of fedicare.

The $40 million snake-bit extravaganza, "Cleopatra," just previewed last month is in trouble again, this time medically. The Epilepsy Foundation blasted portrayal of the epileptic Caesar by Rex Harrison, claiming that seizure scenes will destroy public acceptance that disease can be controlled.

Biggest compliment paid AMPAC yet showed up in a recent bulletin from organized labor's political arm, COPE. Labor sponsors of federal medical care and assorted welfare measures are concerned over AMPAC's successes, conceding that physicians won 25 out of 30 congressional campaigns in which they participated. Said COPE: "AMPAC is in business and means business."

Red China is in the birth control business on an economy basis, according to Hong Kong newspapers. Communist state is emphasizing male sterilization, contending that vasectomy can be "done in outpatient clinics, the patient can go home immediately, and work can be resumed in two days." Accompanying red propaganda says too many children are a "burden," preventing time for work and study.

Mississippi's pioneer law requiring seat belts in new cars is catching on throughout the nation. Latest reading shows similar bills pending in 34 state legislatures and two in Congress. Auto crash investigations reaffirm over and over that belts can, do, and will save lives.

Sincerely,

Rowland B. Kennedy
Executive Secretary

DATELINE - MEDICAL AMERICA

Most Mississippi Counties Levy Special Tax For Hospitals

Jackson - New data published by Mississippi Hospital Association shows that a majority of Mississippi counties levy special tax assessments for support of publicly (county) owned hospitals. Millage ranges from low of 0.25 mils in Alcorn and Warren Counties to high of 5.0 mils in Pearl River and Yalobusha. Median levy is 1.5 mils and mean is 1.92, while 1.0 is mode or most frequently occurring special assessment. Forty-six counties collect such taxes, earmarked for hospital support.

FDA May Curb Nonprescription Antibiotics

Washington - The Food and Drug Administration, proceeding under newly acquired authorities in legislation enacted last year, is looking into over-the-counter marketing of antibiotics. Most such preparations are cough drops and gargles, estimated at 500 in number and accounting for $25 million in annual sales. FDA's position is that value of preparations hasn't been demonstrated and that use of antibiotics should be under medical supervision. First phase of investigation is to examine manufacturers' claims for preparations in advertising and labeling.

Nursing Home Accreditation Body Is Organized

Chicago - The American Nursing Home and American Medical Association jointly organized the new National Council for the Accreditation of Nursing Homes and named a nine-member board of directors. Five are physicians and four represent ANHA. A full-time executive director will soon be named. Objective is to assist in raising nursing home care quality in nation's 9,700 homes having nearly 339,000 beds.

Romney Says He Opposes Fedicare

Washington - Michigan's presidential-un-candidate governor, George Romney, told the National Press Club that he opposes compulsory federal medical care under Social Security and favors providing care for persons who lack the means to pay for it, regardless of their age. This makes two of most-mentioned Republican presidential possibilities, Goldwater and Romney, against fedicare. New York's chiropractor-licensing Rockefeller shares JFK's views on Social Security care.

California Is Again Facing 'Little King-Anderson' Fight

Sacramento - A compulsory state medical care bill, pending in the California legislature, will soon become the focus of the hottest fight since Earl Warren's similar efforts a decade ago. Measure is backed by AFL-CIO and would impose compulsory 3 per cent payroll tax to have state provide medical, surgical, hospital, diagnostic, prosthetic, and nursing services. California Medical Association is girding for major fight.

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
July, 1963, Vol. IV, No. 7

ORIGINAL PAPERS

The Isotope Encephalogram

JACK K. GOODRICH, M.D., FORREST T. TUTOR, M.D.,
and CHARLES L. WEBSTER, JR., M.D.
Jackson, Mississippi

The isotope encephalogram is considered a major advance in diagnostic procedures for lesions of the central nervous system. However, at its present stage of development, it does not present an absolute replacement tool for the arteriogram or intracranial air studies. In this paper the authors review the evolution of isotope encephalography, discuss technique and instrumentation, and report a series of 105 cases including four detailed case histories.

The pioneering work in isotope encephalography was done by Moore[1] at Mayo Clinic in 1948 using I-131 labeled Di-Iodo-Fluorescein as the tracer agent. His detection apparatus was a Geiger-Muller tube with its obvious limitation of poor gamma radiation sensitivity. Subsequently in the early 1950's the scintillation crystal was pressed into service because of its virtue of increased gamma radiation sensitivity. As time passed, the coincidence circuit and positron emitters, the straight bore and focused collimators, and scanning probes made their way to the investigational foreground. Francis, Bell, and Harris[2, 3] contributed significantly to the problem with their heavily shielded collimation of large scintillation crystals and the medical gamma ray spectrometer. To this point, the basic instrumentation of present day scintillation scanning has evolved.

Modifications of scintillation scanning have been investigated with the recent production of the Anger Camera and the Auto-Fluoroscope. Both instruments provide an image of isotope activity within an organ without the scanning motion of the crystal as is commonly used in the more widely accepted clinical isotope devices. These instruments are predicted to be ultimate replacements for the clinical isotope scanning devices, but as yet numerous electronic engineering problems combined with expense in a range of high magnitude do not allow their broad distribution in the clinical laboratories.

The evolution of the radioactive nuclides useful for brain tumor localization is well recorded in the literature. The earliest nuclide labeled agent was Di-Iodo-Fluorescein.[4] Subsequent tagging of human serum albumin with I-131 lead to its use in brain tumor localization based on the observation that the tagged albumin, like Di-Iodo-Fluorescein, had an affinity for abnormal brain tissue. Radioactive mercury, labeled Neohydrin, developed by Blau and Bender[5, 6] is the most recent agent popularly used for brain tumor diagnosis. This agent has many properties advantageous to brain tumor localization. Its rapid clearance from the circulation accounts for a low whole body irradiation dose of 0.29 rads. The monoenergetic gamma emission of Hg-203

From the Department of Radiology-Isotope Center and the Department of Neurosurgery, University of Mississippi School of Medicine.

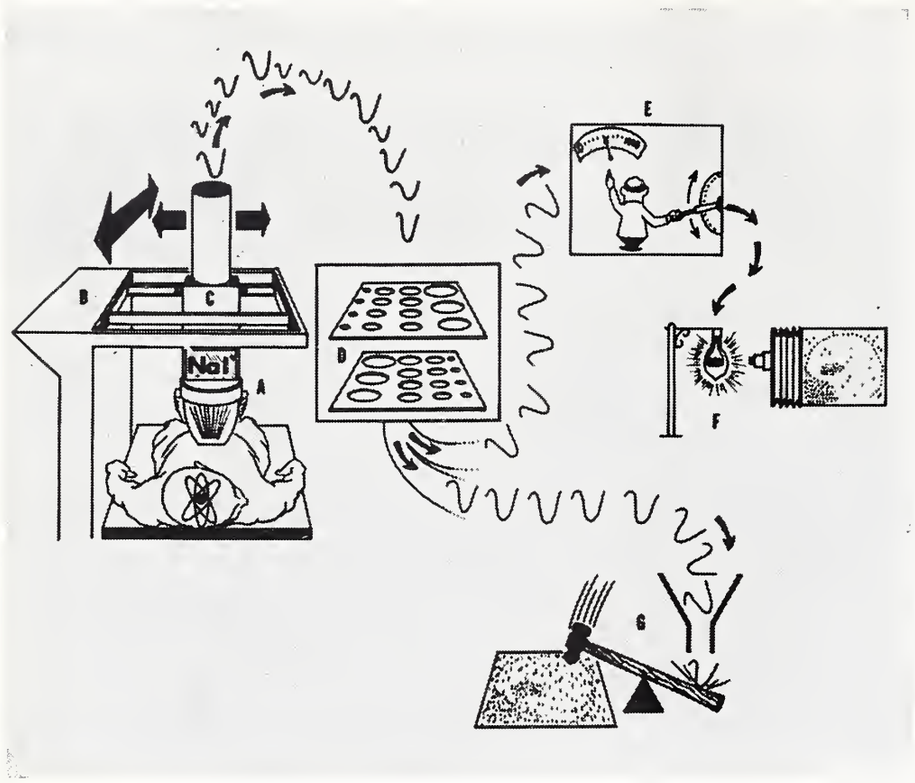


Figure 1. Schematic Diagram of Scanner.

A. Scintillation detector and focused collimator
B. Mechanical scanning support
C. Photo multiplier tube and preamplifier
D. Medical spectrometer (diagrammatic)
E. Count rate meter (diagrammatic)
F. Photo recorder
G. Mechanical dot tap recorder

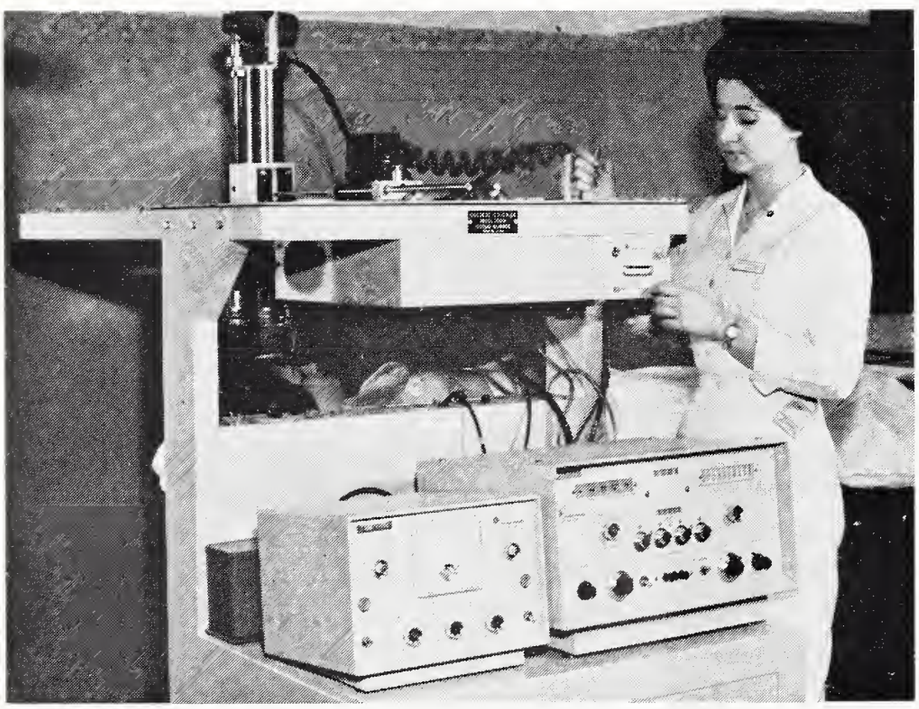


Figure 2. Body Organ Scanner. The instrument panel on right is a medical spectrometer. The panel on left is a count rate meter coupled with photo recorder at the technician's hand.

simplifies the problems of spectrometry and collimation. The long half-life, 47.9 days, allows shelf storage and constant availability of the material for clinical use.

TECHNIQUE AND INSTRUMENTATION

Our technique of brain scanning involves the preparation of the patient by injection of 1 cc. of Mercuhydrin on the day prior to administration of the mercury 203 labeled Neohydrin. The stable Mercuhydrin loads the renal tubules reducing the renal radiation dose. On the morning of the examination, 10 microcuries of mercury 20, labeled Neohydrin, per kilogram of body weight are given intravenously to the patient. A maximum of 700 microcuries total dose is not exceeded. Scanning in one hour following the injection allows a delineation of the vascular pattern of the calvarium similar to that found using I-131 labeled human serum albumin. At three hours following the injection of the isotope tracer, the vascular diffusion has stabilized and the selective accumulation of activity within or about an intracranial lesion provides the scan images. The scanning positions are routinely anteroposterior with appropriate lateral according to clinical findings. Additional posteroanterior, opposite lateral, or special oblique scans may be implemented according to the findings on routine projections.

The instrumentation used for the isotope encephalogram consists of electronic and mechanical units which combine to detect, select, and record the radioactivity pattern within the calvarium. The schematic diagram in Figure 1 de-

picts this combination of devices while Figure 2 illustrates the unit employed in this study. The patient to be scanned is placed on an examination table and the head is completely immobilized with a vacuum modification of a sandbag which when evacuated of air forms a firm, molded cast of the head. Positioned above the cranial vault is the detector (A) consisting of a 19 hole focused collimator before a sodium iodide-thallium activated scintillation crystal. The detector is followed by an electronic entourage (C), a photo multiplier tube and pre-amplification system. The detector is mechanically transported to and fro across the patient's head (B) indexing from head to toe on each pass.

The gamma emissions from the radioactive mercury dispersed throughout the patient's head are perceived by the scintillation crystal having passed through the focused collimator. Those emissions which arise from the field of view of the collimator have nearly all their original energy while those arising more peripherally in the skull or out in the body circulation must reach the crystal by passing through the crystal shielding or the septa of the collimator. These latter emissions are reduced in energy or attenuated. The scintillation crystal, when struck by a gamma ray, flashes, emitting a photon of visible light. The brilliance of this light is proportional to the energy of the impinging emission. This flash of light is transposed into an electrical pulse by the photo multiplier-amplification system which maintains the original gamma energy-light brilliance relationship. Thus a family of pulses of current are transported to the medical spectrometer (D).

The spectrometer may be described as an electronic filtration device. Here, according to instrument settings, one specific-sized pulse may be selected to pass to the recorders to the exclusion of all others of higher or lower magnitude. The selected pulses, representing largely the emissions arising from the view of the detector, are collected grossly and mapped by the dot tapper (G). This solenoid activated recorder coupled with the scanning detector places a linear mark on the record paper for each two pulses which pass through the spectrometer. This dot pattern is useful in confirming landmarks for correlation with radiographic images and also allows a degree of monitoring of scan results during the scanning period. The impulses from the spectrometer are simultaneously carried to the photo-recording instruments which like the dot tap recorder are also coupled to move with the scanning detector.

The first unit in the photo-recording system is the count rate meter (E), which transmits a current flow to a light source in the photo recorder (F). As indicated by the little man on the schematic diagram (Figure 1), there is selective control of this system which maps on photographic film dots of varying degrees of blackness according to the brilliance of the small tungsten filament bulb. The brilliance of the bulb may be balanced so that full brightness is coincident with the maximum count rate from the source, in this case the region of greatest activity in the patient's calvarium. Thus a proportionality is developed wherein the degrees of black to grey to clear on film represent a function of radioactivity concentrations within the brain.

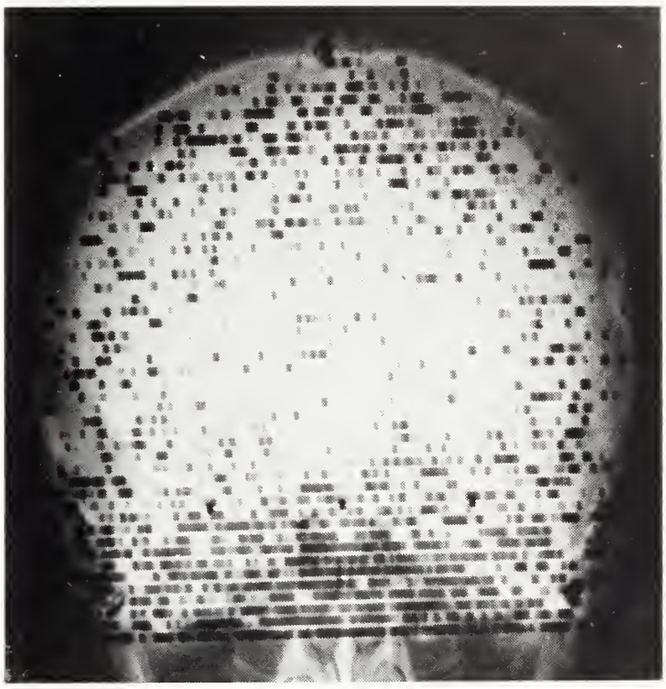


Figure 3. Normal AP photo scan superimposed on PA skull film. Note peripheral distribution in vascularity of scalp as well as about the sinuses and nasal region.

To further enhance the photo scan image, an adjustment may be made to suppress the light until the count rate reaches a chosen level. This editing technique is referred to as contrast enhancement or background suppression. This record correctly superimposed over skull radiographs provides an excellent means of mapping a tumor's location, thus the neurosurgeon at time of surgery has a guide for placement of the incision and for seeking out the intracranial lesion. Figures 3 and 4 are normal AP and lateral scans superimposed on skull films. Note the peripheral distribution of activity along the skull margins and the triangular area over the sinuses and nasal regions on AP view and about the face and eyes on lateral view. These areas represent a physio-

logic uptake of activity in the vascular scalp and in the nasal membranes, sinuses, and temporal muscle mass.

REPORT OF SERIES

In a period of slightly less than one year, 105 isotope encephalograms have been completed. Twenty-four proved brain tumors have been detected in the course of these neuro-investigative studies. The battery of procedures reviewed in-



Figure 4. Normal lateral photo scan superimposed on lateral carotid arteriogram film. Note scalp activity and triangular area of temporal muscle mass and paranasal sinuses.

cludes: The neurological physical, skull x-rays, isotope encephalogram, carotid arteriogram, pneumoencephalogram, and ventriculogram. All six procedures were not required for each case, but a minimum of four studies were completed on each case (see Table 1).

TABLE 1

COMPARISON OF DIAGNOSTIC BATTERY IN 24 BRAIN TUMORS FROM 105 CONSECUTIVE ISOTOPE ENCEPHALOGRAMS

	Cases	*Positive*
1. Isotope Encephalogram	24	22
2. Neurological Physical	24	24
3. Skull Films	23	10
4. Carotid Arteriogram	20	17
5. Pneumoencephalogram	4	4
6. Ventriculogram	3	3

The isotope encephalogram was positive in 22 of the 24 cases of brain tumors. The location of the lesions on scan agreed with the neurological location and were confirmed surgically in 18 of the tumors. One case did not come to surgery because of the multiplicity of metastatic lesions from the lung found on the isotope encephalogram. Three posterior fossa lesions were confirmed clinically and radiographically, but the position of the lesions obviated surgical entry.

The neurological exam was abnormal in all of the 24 tumors. The carotid arteriogram was positive in 17 of the 20 arteriograms performed. One advantage the isotope encephalogram held over the arteriogram accounted for the three diagnoses not made on carotid arteriography. This was the location of posterior fossa lesions which were inaccessible to the vascular supply of the carotid circulation. The pneumoencephalogram and ventriculogram were uniformly positive when employed.

The type and distribution of brain tumors found in this series are shown in Table 2. One

TABLE 2

BRAIN TUMORS: TYPE AND DISTRIBUTION

Meningioma	4
Metastatic Lesion	4
Astrocytoma	3
Glioblastoma	3
Ependymoma	3
Acoustic Neuroma	2
Brain Stem Glioma	2
Oligodendroglioma	1
Cholesteatoma	1
Posterior 3rd Ventricle Tumor	1
	24

brain tumor which did not show localization of activity on the scan was a large cholesteatoma which had been present by history for 20 years. At surgery, this mass was found to be completely encapsulated and essentially devoid of blood supply. We felt that this slowly enlarging lesion did not produce a change in the brain substance about it, and hence there was no alteration of the blood brain barrier to accumulate the isotope tracer. The posterior third ventricle tumor was the second failure of the series for it occurred in a teenage female who refused or could not lie still for the scanning period. Despite what was felt to be adequate sedation, the child moved constantly and the scan images were not diagnostic.

The final clinical diagnoses of the remaining 81 cases in this series were protean in type. The largest single group was termed cerebral vascular accident encompassing cerebral artery thromboses and vascular occlusive diseases. Four of these CVA cases produced definite, positive scan results. This we attribute to a relatively recent occurrence of vascular change which altered the blood brain barrier allowing the tracer to localize

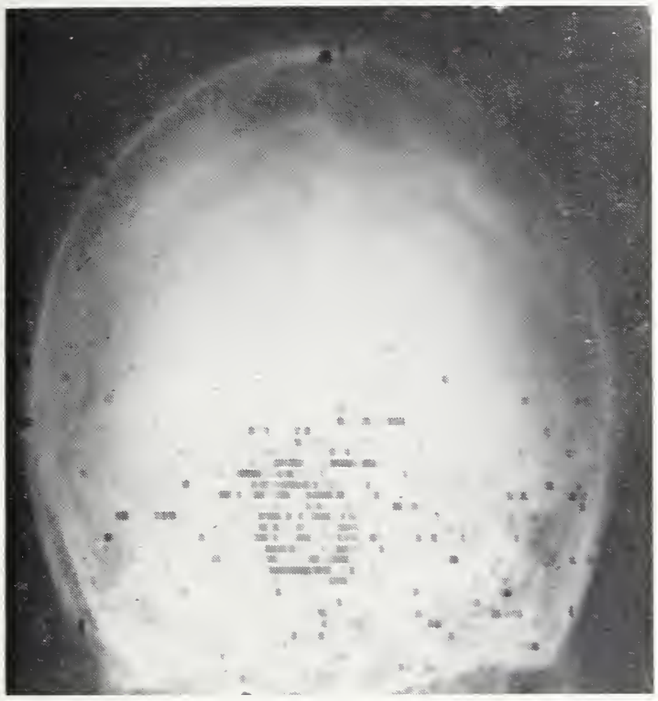


Figure 5. (Case Report 1.) PA scan records a large focus of activity in the posterior fossa to left of midline.

in the effected area. An AV malformation and a chronic subdural hematoma produced the only other positive scan patterns in the series.

CASE REPORT 1

This was a 53-year-old female who had a three to four months' history of nausea and vomiting, vertigo, ataxia, headache, decreased hearing and tinnitus, left ear. Her general physical examination was within normal limits. The neurological examination showed left fifth and eighth cranial nerve involvement, bilateral horizontal nystagmus, broad based ataxia, no papilledema. Routine skull films and cerebral arteriograms were within normal limits. The isotope encephalogram revealed an abnormal collection of activity in the left posterior fossa region (see Figures 5 and 6). Posterior fossa craniotomy was carried out at which time a left cerebellar-pontine angle mass was identified which extended rostrally along the brain



Figure 6. (Case Report 1.) Left lateral scan superimposed on left carotid arteriogram localizes the abnormal posterior fossa focus of activity.

stem through the tentorium. Pathological diagnosis was sarcomatous meningioma.

CASE REPORT 2

This was a 54-year-old male who had shown personality changes for two years. He had had transient diplopia and severe frontal headache for 18 months. The general physical examination was within normal limits. The neurological examination revealed a euphoric, irresponsible male whose optic disc margins were indistinct, but within normal physiological cupping and normal fundal venous pulsations. The remainder of the neurological examination was within normal limits. Routine skull films showed posterior clinoid erosion. The cerebral arteriogram (Figure 7) was indicative of a subfrontal mass lesion. The isotope encephalogram demonstrated an accumulation of

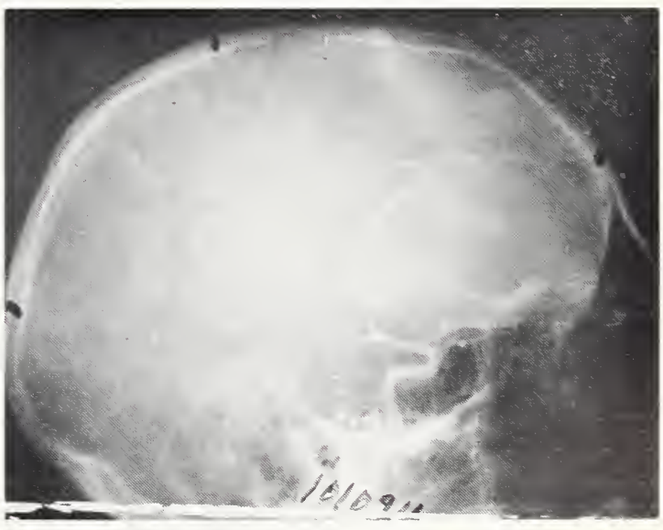


Figure 7. (Case Report 2.) Right lateral carotid arteriogram reveals marked upward and posterior bowing of the anterior cerebral artery.

abnormal activity along the base of the anterior fossa, predominantly on the right (Figures 8 and 9). Anterior fossa exploration disclosed a large subfrontal meningioma which was totally removed.

CASE REPORT 3

This was a 45-year-old male who had had severe occipital headaches for one month and subsequent loss of control of the right hand. He had had aphasia for three weeks prior to admission and an asymmetrical smile for three weeks. A routine chest film disclosed nodular densities in the right hilum and apex. Subsequent bronchial washings were positive for Grade three anaplastic cells, although direct bronchoscopy was

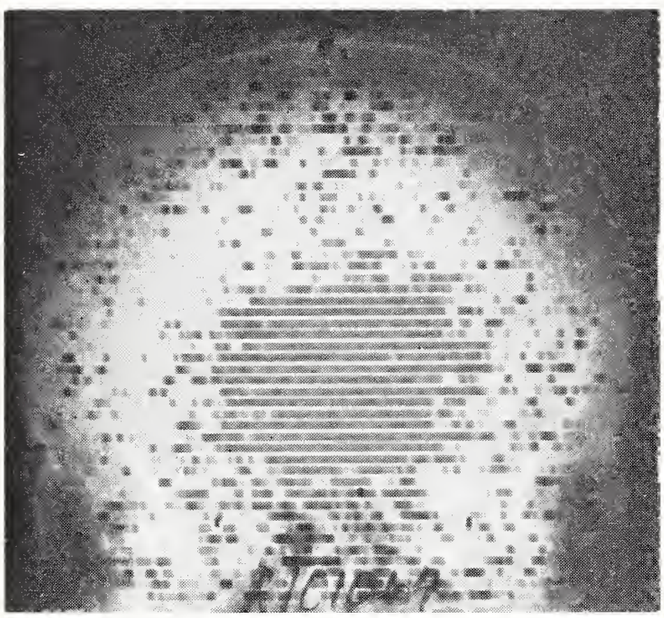


Figure 8. (Case Report 2.) AP scan records focus of abnormal activity in the midline of calvarium.

negative. Four days prior to admission, the patient noted the onset of intermittent diplopia and weakness of the right leg. On admission, the general physical examination was within normal limits. Neurological examination revealed a verbal aphasia, paresis of the right lower face, and right hemiparesis. The patient's sensorium was relatively clear. Routine skull films were within normal limits. Three days following admission, the patient was noted to have bilateral papilledema with a concurrent onset of nausea, vomiting, and convulsive seizures. The isotope encephalogram demonstrated at least five discrete areas of abnormal activity, two on the right and three on the left (Figures 10 and 11). Because of the multiple bilateral foci, no operative procedures were contemplated or carried out.

SUMMARY

The isotope encephalogram is thought to be a major advance in diagnostic procedures for lesions of the central nervous system. At its present stage of development, it does not present an absolute replacement tool for the arteriogram or intracranial air studies. Its value as a complementary procedure for the arteriogram has supplanted in many cases the need to employ either pneumoencephalograms or ventriculograms which carry

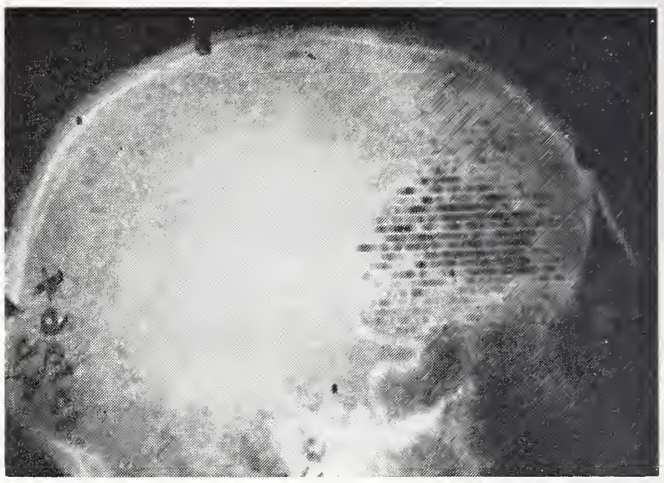


Figure 9. (Case Report 2.) Right lateral scan with arteriogram. Note excellent correlation of lesion focus and vessel displacement.

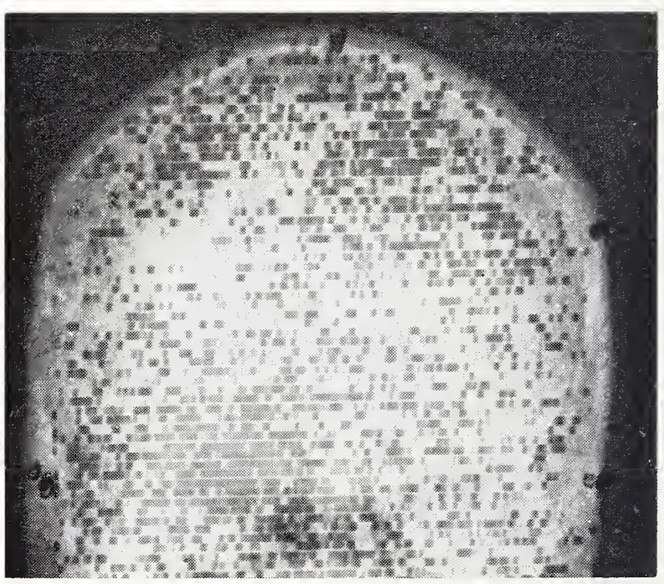


Figure 10. (Case Report 3.) AP scan with skull film records a focus at right orbital level, a focus near right skull periphery, and two closely positioned lesions in the left hemisphere.

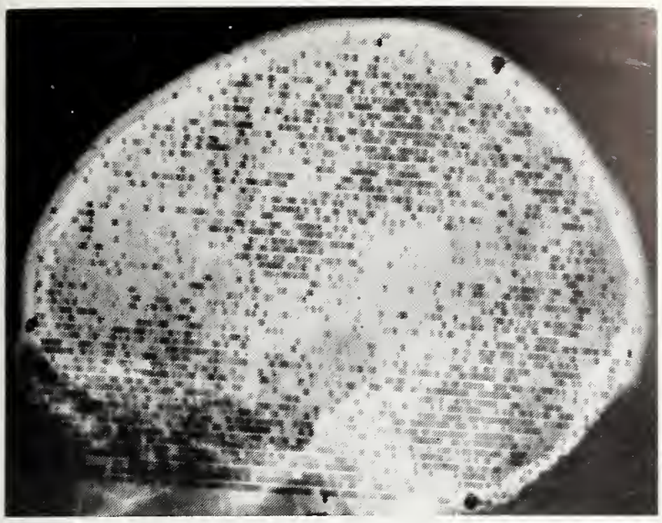


Figure 11. (Case Report 3.) Left lateral scan records a posterior fossa lesion, two lesions in parietal area, and one subfrontal lesion.

added patient risk. Another advantage as shown in Case Report 3 is the determination of multiplicity of lesions which may preclude the need for subjecting a patient to further diagnostic or surgical procedures. The chief limitation of the procedure is found in the search for lesions lying within or juxtaposed to the physiologic areas of high activity, i.e. the sellar and parasellar regions. Fortunately, these lesions may be expected to present more classical symptomatology, and their diagnosis may be confirmed by neurological examination and endocrinologic evaluation.

The isotope encephalogram offers an excellent first-step procedure in screening neurological patients. To this end, its advantages are multiple for there is no reported patient morbidity, no post-procedural sequelae, and it lends itself well to outpatient examination. ★★★

2500 North State St.

Aided by Grant Number IN-60 for the American Cancer Society, Mississippi Division.

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'DREAM A WHILE . . .'

The psychiatrist was remonstrating with his patient who reported sleeping soundly with no dreams: "How can I help you," he contended, "if you refuse to do your homework?"

—James Ward, *Jackson Daily News*

New Frontiers in Orthopedic Surgery

PAUL S. DERIAN, M.D.
Jackson, Mississippi

In recent years an increase in basic and clinical orthopedic research has occurred. This has been pioneered by the medical centers with increased research tools as radioactive materials have become available. Clinical research has similarly gained as clearer understandings in bone and cartilarge cellular pathology were obtained. The popularity of some methods have fallen (bone glue) while newer approaches to old problems have stimulated further research (calcium loading in the idiopathic osteoporosis).

The author reviews some thought-provoking papers which have and will influence the field of orthopedic surgery.

ORTHOPEDIC SURGERY, at times lagging behind in basic and clinical research, has in the past several years narrowed the gap through vigorous activities. The areas in which outstanding progress has been made are:

1. bone and cartilage cellular pathology,
2. reconstruction,
3. metabolic bone disease,
4. rehabilitation and prosthesis.

CELLULAR PATHOLOGY

Rhinelander and Baragry, using the basic techniques of microangiography by Trueta, outlined the vascular pattern of the normal and fractured radius-ulna in the dog. The finely perfused barium sulfate established that the medullary arterial system, when available, was the dominant vascular pattern evolving after fracture. Frost and Milch working independently with nontoxic, nonradioactive, tetracycline were able to mark the surface of new bone growth. Exposed to ultraviolet light a characteristic fluorescence was detected. Ponsetti and Bottcher, with the use of beta amino-propionitrile (from the common sweet pea), experimentally suggested that many diseases involving intercellular ground substance disturbances of collogen and fibril formation may be related.

The use of bovine bone for heterografts is not new. Homener, Bassett, and Creighton, reducing the antigenicity by extraction of water soluble fractions and serum suggested its use as a substitute for the homograft. At present, bone replacement in order of preference still remains as follows: autografts, homografts, and heterografts. The wide acceptance of the bovine heterograft will have to await further animal experimentation. Entin, Alger, and Dard transplanted autogenous joints experimentally and clinically. They concluded that "although permanent survival of a bone and joint transplant does not always take place, a painless articulation in small, nonweight-bearing joints may afford some range of motion." The potential of this procedure is vast, but selectivity in its use must be advised.

Autoradiography, with the use of titrated thymidine has demonstrated that injured cartilage undergoes necrosis and proliferates but lacks the vascular response of inflammation that one normally sees with soft tissue or bony healing. Southwich and Crelin, utilizing the principle of sustained compression force, noted a local breakdown of articular cartilage and its proliferation by mitotic division. This, obviously, can be applicable to those injuries of the knee joint's cartilaginous structures which occur in athletics.

The use of radioactive materials has markedly influenced basic research in orthopedics. P^{32},

From Orthopedic Surgery, University of Mississippi School of Medicine.
Read before the Founder's Day Program, Alexandria, La., Jan. 12, 1963.

Ca^{45}, Ca^{47}, Ga^{72}, I^{131} and others have been used principally in three areas:

1. attempting to solve the problem of avascular necrosis of the femoral head,
2. aiding in tumor localization,
3. studying the basic mechanisms of bone—cartilage formation and function.

DePalma and Tsaltas, using S^{35} demonstrated survival of osteocartilaginous transplants in dogs.

Despite many studies regarding immunological response to bone grafts, only quantitative measurements have been possible. Burwell and Gowland studied the antigenicity of cancellous bone in 97 rabbits, utilizing the response of regional lymph nodes. Evidence is presented to show that the medium and large lymphoid cell response solution to bone graft implant rejection has become an important field for further research. Bassett's excellent review of the current concepts of bone formation implies that oxygen concentration may determine the type of matrix precursors synthesized by cells and influence the composition and form of the extracellular matrix. The electron microscope utilized by Robinson at least ten years ago has helped to stimulate present day research into the microstructure of bone.

RECONSTRUCTION

Stillwell, using monkeys, produced scoliosis, kyphosis, or a combination of both. This can be an invaluable tool for evaluating deformities of bone in the adult. Harrington with SMo 18-8 stainless steel rods as compression and distraction forces, has been able to correct and maintain idiopathic and acquired scoliosis. Augmentations, with the conventional autogenous posterior fusion and plaster casts, are done. This approach, though not basically new, has been most effective. Time will determine its universal acceptance. The stimulus which Harrington has given to the field of scoliosis management must be commended.

Femoral neck fracture care without long-term complications (nonunion, avascular necrosis) still appears to be unsolved. The debate as to primary prosthesis vs. reduction and pin fixation still exists. Hinchey reviewing 294 consecutive cases in fresh femoral neck fractures treated by primary prosthetic replacement noted the 72 per cent excellent or good results. This figure is no better or worse than conventional care of the fracture with a threaded pin, screws, or Smith-Petersen nail. The replacement prosthesis, to be most effective, should be used in selected cases.

Boyd and Calandruccio, using P^{32} one hour prior to surgery, compared the specific activity in the femoral head and trochanteric region. Utilizing microscopic sections, autoradiographic techniques and x-rays, a correlation of 83 per cent has been possible. Woodhouse, using a redox transistorized unit, has measured the oxygen availability within the head of the fractured femur. This most difficult method of evaluation requires further animal experimentation to approve its validity.

Moncrief has pointed out that delayed healing of fractures results, particularly during the first three weeks, after whole body radiation. Clinical healing is delayed ⅓ of the normal time allocated for a closed fracture. James evaluated the long-term effects of ultrasonic energy on the femurs of the dog. Seemingly, dosages from 0.6 to 2 watts did not produce any bony changes. This dosage is essentially the range in machines in use today.

The status of polymer osteosynthesis that gained limited popularity in 1958-1959 by the initial studies of Mandarino and Salvatore is no longer in doubt. Redler reported 37 failures in 51 procedures. No osteoblastic activity has ever been demonstrated with the use of the polymer.

"Bone glue" in its present form, does not have a nitch in orthopedics.

Law and McMaster have given support to osteotomies of the spine. Correction of fixed, flexed, spinal deformities 40 to 60 degrees is possible, with a reasonable low mortality. Its use is primarily in those individuals with Marie-Strumpell arthritis of the spine. Careful selection of the patient must be stressed.

Planograms are playing an increased role in orthoradiological diagnoses. Arthrograms using a contrast media do not appear to have any advantage over a careful clinical evaluation. Their value, however, is in differential diagnosis in knee trauma when clinical evaluation becomes equivocal.

METABOLIC BONE DISEASE

Frost feels that there is no valid proof that estrogen stimulates new lamellar bone in adults or animals. Evidence at present is that postmenopausal osteoporosis is a disorder of osteoclastic activities. More exacting balance studies in the osteoporotic patients are needed. Nordin's suggestion that calcium deficit is one of the causes of osteoporosis continues to be evaluated. There

are no medications, at present, which have restored normal trabecular patterns in the idiopathic osteoporotic patient.

REHABILITATION AND PROSTHESIS

The prosthetic group at the University of California several years ago introduced a new design of below the knee prosthesis. Termed the patella tendon-bearing cuff suspension, it combined the following:

1. soft socket with the stump in flexion allowing the patella to bear considerable weight,
2. rotation controlled by making the prosthesis higher in front and in the side,
3. elimination of the thigh corset. The prosthesis has proved to be fruitful in those patients that do not have cruciate or collateral ligamentous tears of any significance, minimal or popliteal scars, and are not heavy-duty laborers. This form of prosthesis has become a part of the prosthetic prescription.

The figure-of-8 harness in upper extremity prosthesis has been augmented with the use of a ring in its posterior cross-over area. This has allowed freer and increased range of motion for the patient.

In the past years greater emphasis has been placed on early postoperative ambulation. Rusk feels that rehabilitation prior to injury can contribute to accident prevention in the elderly. Dasco and Itoh found that 4.5 per cent of accidents resulting in hip fractures occurred in institutions. This suggested to the authors that the need to strengthen precautionary measures was evident. Congenital abnormalities, namely phocomelia, have emphasized the need for exacting and diversified programs in rehabilitation and prosthesis.

SUMMARY

Many stimulating and thought-provoking papers might be mentioned, but as so often happens, time does not permit. Research should not depend upon a gimmick or a "novel" approach, but on the solving of everyday problems.

All new methods should eventually be given a sufficient trial. "How long?" will often be determined by the nature of the procedure and the expected end result. ★★★

2500 North State St.

NOSED OUT

Among the Nobel laureates arriving in Stockholm in 1945 to receive their famed prizes was Sir Alexander Fleming, the British discoverer of penicillin, who had a corker of a cold. During the proceedings, he tended his nose frequently with his handkerchief. At adjournment, one of the Swedish officials confronted him, inquiring sympathetically, "No good for colds?"

Clinicopathological Conference XLII

Conducted by the Department of Pathology
University of Mississippi School of Medicine
Jackson, Mississippi

In CPC XLII Dr. David G. Watson discusses the case of a six-year-old Negro female admitted on Feb. 1, 1961, to the University Hospital in Jackson with a chief complaint of generalized swelling for ten days, fever for eight days, and respiratory difficulty for five days. The child had been previously admitted in May 1960 with congestive failure symptoms and had been treated with digitalis and discharged in September 1960 to be maintained on digitalis and aspirin.

Other participants in the CPC are Drs. Robert D. Sloan, Joel Brunson, and Herbert G. Langford.

THIS SIX-YEAR-OLD colored female was admitted Feb. 1, 1961, for her second University Hospital admission with a chief complaint of generalized swelling for ten days, fever for eight days, and respiratory difficulty for five days. She was admitted for the first time in May 1960.

This child was apparently well until February 1960, when she developed a mild upper respiratory infection. Two weeks later, or seven weeks prior to her first admission to the University Hospital, she began complaining of leg and epigastric pain which was followed by pedal edema, dyspnea, and which was associated with fever. She was seen by a local physician in Columbus, Miss., who told the mother that the patient had heart and kidney disease and admitted her to a hospital in Columbus. She was treated with penicillin, digitalis, and three liquid medications, but failed to improve. Because of her failure to respond to therapy, the patient was referred to the University Hospital on May 29, 1960.

The duration of her hospitalization was 20 days, and the hospital course showed a gradual improvement of her congestive failure symptoms which required several readjustments of her digitalis dose. She also received prednisolone, 20 mg. per day for two weeks. On June 17, the patient was in no distress and clinically doing well. She was discharged on June 19, 1960, on 0.25 mg. digoxin b.i.d., ASA 5 gr. every 6 hours, and instructions to continue complete bed rest and to return to the pediatric clinic for follow-up. She failed to keep her clinic appointments and was not seen again until Feb. 1, 1961.

According to the mother, she had done well following her discharge from the hospital and had been maintained on digitalis and aspirin until September of 1960, when she started to school. The aspirin was discontinued at that time, but the digoxin was not. Ten days prior to her second referral to the University Hospital, she began to have some swelling of the feet and abdomen followed by fever and profuse sweating. These symptoms progressed, and two days later she began coughing and having difficulty breathing. She was taken to her local physician who referred her to the University Hospital. There was no history of erythema, skin rash, or chorea prior to either of the two admissions. However, it was stated that at the onset of her illness in February, she developed some nodules on her legs and that during the course of her first hospitalization, she developed urticaria which was attributed to penicillin. Family history was noncontributory.

Physical examination on admission revealed a fairly well developed, acutely ill six-year-old colored female with marked respiratory distress. The pulse rate was 130 per minute, respirations were 40, and blood pressure was 100/40 in her right arm. Significant physical findings included decreased breath sounds over the entire left chest and dullness to percussion, scattered rhonchi over the

right chest, but no rales. The precordium was hyperactive with an increased thrust. The PMI was palpable in the 5th left intercostal space in the midclavicular line. A grade I to III pansystolic murmur was heard over the entire precordium with maximum intensity at the apex and radiation into the axilla and posteriorly. P2 was increased. There was a loud cardiac friction rub along the lower left sternal border and a questionable gallop rhythm along the lower left sternal border. The abdomen was flat, and the liver was down three fingerbreadths below the right costal margin in the midclavicular line. The spleen was not palpable. Examination of the extremities revealed two plus pedal edema. There was no venous distention in the neck, no cyanosis, skin rashes, or nodules.

Initial laboratory data showed hematocrit 21, reticulocyte count .4 per cent, WBC 25,550 with a differential of 50 neutrophils, 25 bands, 20 lymphocytes, and 5 monocytes. Sickle cell preparation was negative. Sedimentation rate was 43 ml. per hour, C-reactive protein 3-plus, and ASO titer 50 units. VDRL was negative. Urinalysis showed albumin, trace, negative glucose and acetone. There 4 WBC/hpf.

Chest x-rays in AP and lateral projections revealed the left hemithorax almost entirely opacified by an apparent pleural effusion extending to the level of the first rib anteriorly and a mediastinal shift to the right. The EKG revealed a left ventricular hypertrophy and strain with markedly abnormal ST-T segment changes.

After the initial laboratory tests were obtained, thoracenteses were performed at the level of the 7th and 9th intercostal spaces in the posterior axillary line, but only 4 cc. of yellow straw-colored fluid could be obtained. Gram stain of the fluid revealed no organisms; stains for acid fast bacilli and fungi were also negative. The protein concentration of the pleural fluid was 3.1 gm. per cent. The patient was placed in oxygen, given Mercuhydrin, digoxin, and Erythromycin. A repeat x-ray following thoracentesis showed only slight increase in aeriation of the left apical region. In addition to the congestive failure therapy, she was started on prednisolone.

A repeat thoracentesis on the day following admission was performed, and 230 cc. of straw-colored fluid were obtained. The patient had some improvement in her respiratory distress, but little x-ray change in the appearance of the left chest. A gram stain of the fluid was again negative; however, a culture from the same fluid was reported as positive for an anaerobic, gram positive, spore-forming rod, thought to be a contaminant. Protein concentration of the fluid was 4.2 gm. per cent.

Because of the low hemoglobin, she was transfused with 150 cc. of packed cells. On the fourth hospital day, she was noted to have venous distention and increased respiratory distress. It was elected to attempt another thoracentesis, although two previous attempts had been successful only in removing 12 cc. of fluid. At this time only 20 cc. of a slightly turbid straw-colored fluid could be obtained. The digoxin and Mercuhydrin were gradually increased with some improvement of the respiratory distress, but the patient continued to have a tachycardia and on various occasions a cardiac friction rub could be heard.

Electrolytes on the 9th hospital day revealed a chloride of 95, CO_2 of 34, potassium of 5.5, and Na 140 mEq/L, respectively. The total serum protein was 5.5 gm. with 1.8 gm. per cent albumin. There was a venous pressure of 37 cm. of water. The patient was started on ammonium chloride by mouth and transfused with 100 cc. of whole blood. There was very little improvement in her overall condition although she lost approximately two pounds of edema. On the 12th hospital day, increased respiratory distress was again noted, associated with a cough productive of a small amount of blood-tinged sputum.

The following morning, because of her extreme apprehension, she was given 5 mg. of morphine sulfate prior to a blood-drawing procedure. The morphine failed to delay her apprehension, and at the time of the vena puncture, she suddenly became apneic and her heart rate slowed to 20 per minute. Resuscitative measures failed, and she was pronounced dead at 8:45 a.m. on Feb. 24, 1961, thirteen days after admission.

Numerous blood cultures obtained during her hospitalization failed to grow out any organisms. Tuberculin and histoplasmin skin tests were also negative. A hemoglobin electrophoresis drawn on admission showed 50 per cent hemoglobin A and 50 per cent hemoglobin C.

DISCUSSION

Dr. David G. Watson: "We are discussing a 6-year-old colored female who was admitted on Feb. 1, 1961, and expired on Feb. 14, 1961. As you can see, her chief complaints included generalized swelling for ten days and fever for eight days with respiratory difficulty for five days at that time, but her history goes back to May 1960 when she had been first admitted. Three months previously she had developed a mild upper respiratory infection followed two weeks later by leg

and epigastric pain, edema of the feet, dyspnea, and fever. A physician who saw her at that time suggested that she might have heart and kidney trouble, and she was admitted to another hospital and treated as noted without improvement. Apparently this went on for about seven weeks, and she was referred to the University Hospital in late May where she was hospitalized for 20 days with improvement in her failure with digitalis. I am not sure whether she had a heart murmur at this time, and I am sure she had some laboratory work which was done but we are not given the results of that. I would like to ask if she had a murmur at that time?"

HEART MURMUR

Physician: "There was a grade II systolic murmur at the apex radiating to the left axilla. P2 was greater than A2."

Dr. Watson: "The murmur that we hear later on was of similar character, and I think that this is pertinent to the history. She was discharged after about three weeks, having been treated with aspirin, some prednisolone, and digoxin, and was supposed to come back to the clinic but did not do so. She apparently did not receive any prophylactic penicillin. The general course up to this point would suggest that she had had rheumatic fever and ordinarily she should have received prophylactic penicillin.

"Her mother apparently thought she was doing well. She stayed on the digitalis and discontinued the aspirin after about three months. As noted here she again developed swelling of the feet and abdomen with fever and sweating. She developed coughing and difficulty breathing and was referred again here. Some negative findings were given. There was no erythema, skin rash, or chorea prior to either of the admissions. There was mention of some questionable nodules on her legs before her first hospitalization, and I believe that during her first hospitalization she had urticaria which was attributed to penicillin.

"Physical examination on this final admission showed a fairly well developed, but acutely ill, girl in moderate respiratory distress. The pulse rate of 130 is slightly elevated, the respirations of 40 are elevated for a 6-year-old, but with marked respiratory distress they might have been a little higher. Blood pressure of 100/40 is perhaps a wider pulse pressure than we usually see in this age group. Most children don't have a pulse pressure that exceeds 45-50 mm. of mercury. When one sees a pulse pressure of 60 mm. of mercury, one does wonder if there isn't any leakage from the aorta due to either a patent ductus or an aortic insufficiency. Aortic insufficiency comes to mind, but there is no further evidence for this and we just mention it in passing.

"There were positive findings in the chest including decreased breath sounds and dullness to percussion over the whole left chest, with some rhonchi scattered over the right chest. There was a hyperactive precordium. The point of maximum impulse in the fifth left interspace in the midclavicular line does not by itself suggest any cardiac enlargement, but this may be misleading. There was a grade I to III pansystolic murmur heard over the entire precordium with maximum intensity at the apex and radiation in the axilla and posteriorly. I am not sure of the pitch of this murmur, but its other characteristics certainly suggest mitral insufficiency, regardless of cause. The accentuation of the pulmonary second sound, if real, might suggest increased pressure in the pulmonary arterial system.

"Then we come to a very interesting finding—a loud cardiac friction rub along the lower left sternal border, which indicates pericarditis. The gallop rhythm would go along with heart failure, as would the liver enlargement (3 fingerbreadths below the right costal margin) and the pedal edema. Venous distention is a little difficult to evaluate sometimes, and the fact that there was no obvious venous distention would not militate against this.

SUMMING-UP

"So to sum up her situation to the point of her laboratory data we have a girl who was acutely ill with definite findings indicative of heart failure, of pericarditis, and who has a murmur which strongly suggests mitral insufficiency. She had a history of a previous episode involving heart failure at which time she also had a similar murmur. As to laboratory data, she had a hematocrit of 21. I am not sure of the hemoglobin, but this would suggest that it was reduced. The reticulocyte count was only 0.4 per cent.

"She certainly had signs of inflammation. She had all three of the indicators of nonspecific inflammation which the modified Jones's criteria accept when one considers the diagnosis of rheumatic fever, i.e. an elevated white blood count, an elevated sedimentation rate, and an elevated C-reactive protein. None of these things are specific, and there are a number of other things which could have elevated them. Especially, the white count of 25,000 with a rather nonspecific differential might mean a lot of things. The sickle cell preparation was negative. The ASO titer of 50 is not elevated which would not help you in suggest-

ing any recent streptococcal infection, but certainly wouldn't rule out that she had had one some time further in the past. A trace of albumin could go along with her degree of heart failure. I wonder if this wouldn't be an appropriate time to show the x-rays."

CHEST FILMS

Dr. Robert D. Sloan: "A routine chest film at the time of the patient's first admission revealed a grossly enlarged cardiac silhouette, the contour being essentially nonspecific along with obvious congestive changes extending outward into the lung fields. The pulmonary congestive changes appeared to clear somewhat under therapy, but at the time of discharge the overall pattern had not changed significantly. A film obtained at the time of the second admission revealed that the left hemithorax was in essence totally opaque, save for a small amount of apparently aerated lung at the apex. The mediastinum was shifted somewhat to the right, and the heart borders were so obscured that it was impossible to evaluate its size. The right lung looked surprisingly clear, with the congestive changes not being as marked as they were on the earlier admission.

"It is intriguing to try to explain the massive opacification of the left hemithorax. An extensive collection of pleural fluid could produce the pattern shown, but, if so, it is probably not related to congestive failure. Unilateral pleural effusion, due to congestive failure, is much more likely to occur on the right side, and with this degree of effusion due to failure, one would expect bilateral change. Another possibility would be that the density is due to a massive consolidation of the lung parenchyma. One of the films taken after an attempted pleural tap showed a small amount of air in the pleural space, the appearance suggesting that the process might actually be consolidation rather than pleural fluid, but I can offer this only as a suggestion."

Dr. Watson: "Don't you feel that ruled out pleural thickening?"

Dr. Sloan: "No, I could not say that with any assurance."

EKG DATA

Dr. Watson: "Thank you very much. The EKG showed left ventricular hypertrophy. This would certainly go along with the mitral insufficiency which we had postulated. The markedly abnormal ST-T changes could be due to a number of things—certainly you get ST-T changes with pericarditis and also with digitalis. As mentioned, multiple thoracenteses were performed with varying results as indicated—varying from 4 cc. to 230 cc. of fluid. Two protein determinations were made. One was 3.1 gm. per cent and another was 4.2 gm. per cent. There has been an evaluation of pleural fluid on the basis of specific gravity and of protein to try and decide whether such fluid is a transudate or an exudate. The correlation is better with the protein content than with the specific gravity, and the point where they cross over is about 3 gm. per cent with a transudate usually being less than that and an exudate usually more than that. The first one here is obviously on the fence, but the second one somewhat suggests that this fluid is an exudate. An organism was found on gram stain but was thought to be a contaminant so in essence we shall regard this as a sterile fluid.

"Her treatment also included two infusions—one of packed cells and one of whole blood to bring her hemoglobin up. Her congestive heart failure did not respond too well and required increasing amounts of digoxin and also diuretics. Her friction rub persisted. Her electrolytes were not remarkable except for a suggestion of some respiratory acidosis perhaps and lowered serum protein—serum albumin specifically.

"On her 12th hospital day she coughed up a little bit of blood-tinged sputum, which may be quite significant. This was the day before she died. The mode of exit is worthy of comment. She was extremely apprehensive and had apparent cardiac and respiratory arrest at the time of vena puncture. People who are extremely ill sometimes require very little stimulation to stop their vital functions. We have seen a number of patients who have arrested during a minor procedure like this.

"We are also given the information that her blood cultures throughout were negative, and her hemoglobin electrophoresis was 50 per cent hemoglobin A and 50 per cent hemoglobin C. The carrier state for hemoglobin C is a pretty benign thing. It may produce a few changes in the CBC with perhaps some hypochromia and target cells but should not materially contribute to anemia or any other loss of well being. I mentioned the blood-tinged sputum because there is a slight question as to whether she had a pulmonary infarct. However, there is no evidence that she had any venous thromboses. Her last x-ray was made several days before she died and so is no help.

CARDIAC DISEASE

"I think it is fairly clear that this girl had cardiac disease. Although renal disease was briefly mentioned early in her case, I don't think there was anything later to support this. She only had

a trace of albuminuria, she didn't have any hypertension, and I assume that her BUN wasn't elevated. In this age group, with heart failure and repeated heart disease certainly the most likely diagnosis is rheumatic fever. Although it is imperfect, the modified Jones's criteria are a help. The major criteria are carditis or polyarthritis, subcutaneous nodules, erythema margination and chorea, of which we only had evidence of carditis on the basis of a significant murmur plus failure and pericarditis. As to minor criteria, she had fever, elevation of the indicators of nonspecific inflammation. She did not have any arthralgia. On her second admission you could say that she had a previous history of rheumatic fever. She did not have any good evidence of any relationship to streptococcal infection. I am not sure whether she had any prolongation of the PR interval on the EKG. However, rheumatic fever would certainly be the leading basic disease here and could account for the failure and for the pericarditis.

"Perhaps the next most common thing we see in this age group leading to cardiac enlargement and failure are the various endomyocardial diseases, which are difficult to differentiate. The most common of these is endocardial fibroelastosis. This is perhaps a little more common in the younger age group, usually under about 3 or 4, but certainly it can occur at this age group. It is not associated with pericarditis. However, it certainly can be associated with mitral insufficiency and intractable failure. The left ventricular hypertrophy with a strain pattern on the electrocardiogram would support this. The fact that she seemed to do well while maintained on digitalis and then got worse would not necessarily be against this.

"Congenital heart disease we can mention. However, though the murmur is similar to that of a ventricular septal defect—the latter usually has a thrill. Also in the absence of complications, heart failure is rather unusual at this age in patients with congenital heart disease. As to complications of either rheumatic fever or congenital disease, which could produce failure, one ought to mention bacterial endocarditis. She did have a few things that suggest this. She had an underlying heart disease, and this became worse with failure. She did have fever and an elevated white cell count. She had a lowered hemoglobin. On the other hand, the blood cultures which were taken were negative. There was no mention of any petechiae or other tendency for bleeding such as microscopic hematuria. The spleen was not enlarged.

"I also think mention ought to be made of the differential diagnosis of pericarditis which is a very interesting thing in children. A little over half of them are rheumatic, but you can really only make this diagnosis with any confidence in the presence of rheumatic heart disease or active rheumatic fever with a murmur. This child did have such a murmur. The next most common thing would be septic pericarditis and although one can't rule this out she wasn't running a particularly septic course during her second admission. This apparently was preceded by some fever, but could I just ask what her course of her fever was during her hospitalization. Was it fairly normal—did she spike very much?"

COURSE OF FEVER

Physician: "Her fever was 101.5 when she came in and in 24 hours was 102. Then she was afebrile until the sixth hospital day when it spiked up to 101 again. Four days later there was one more spike."

Dr. Watson: "Thank you. An increasing number of patients may have the so-called idiopathic or benign pericarditides which are thought to be viral because some of the ones that have had a proven etiology have been viral such as the coxsackie. In the absence of other things this would be something one would have to think of but I think the presence of the murmur and so on would be against this. One doesn't usually get a murmur in the idiopathic pericarditis although it certainly can be associated with failure. A few less common things would be TB, histoplasmosis, and uremia. There is no note that she had any positive skin tests. There is no suggestion that she had uremia. Although one can have rheumatoid arthritis for quite awhile without having joint involvement, I think one would be foolhardy to suggest rheumatoid disease in the absence of any joint involvement, and in the presence of a mitral insufficiency murmur.

"Having discussed that, I would come back to the diagnosis of rheumatic heart disease with mitral insufficiency, congestive failure, and pericarditis. Then I would wonder what is going on in her left lung. I will accept that her protein is a valid finding and that she has an exudate there, but I am not sure of the cause. One could have a sterile exudate on the basis of pneumonia. With extreme rheumatic activity one could have rheumatic pneumonia. I am unable to uncover much suggestion that this is very often associated with any specific type of exudate. On the other hand this may really be a transudate due to failure after all. I am not sure what is going to be found on the left side. I would suggest that there may be localized collections of fluid. The pleura may be

somewhat thickened, and the lungs may show evidence of pneumonia which may or may not be of the rheumatic type."

PATHOLOGIST'S REPORT

Dr. Joel Brunson: "This is a case that is of some interest, as I will point out in the discussion as we go along. Dr. Watson has already touched upon some of the peculiar aspects of this case. At postmortem examination, the heart was found to be enlarged, weighing almost 400 gm. which is quite large for a 6-year-old child. Along the pericardial surface there were numerous shaggy strands of fibrin (Figure 1). Most of the pleural cavities were occupied by lung which appeared to be solid and had a consistency similar to that of spleen, with a deep dark purple color. There was also some thickening of the pleural surfaces. In other areas of the lung some fibrinous exudate was present on the pleural surfaces.

"On further examination of the heart, certain characteristic lesions became evident. On the mitral valve, along the free margins all the way across, there were small, opalescent verrucae, quite firm. Some of these extended downward onto the chordae tendineae. The chordae themselves were perhaps slightly thickened, although there did not appear to be any appreciable degree of shortening or retraction. On the other hand, the valve itself was somewhat thicker than it should be. Some scar tissue was present and extended up into the posterior aspect of the left atrium, and there was some thickening of the endocardium in that region. The left atrium was also slightly dilated. Indeed the whole heart appeared somewhat dilated and this may have accounted for the murmur, but as far as any significant degree of functional insufficiency of the valve itself, it was not thought to be present at the time of autopsy. These lesions are considered pathognomonic for rheumatic carditis.

"On the aortic valve there were also vegetations such as those on the mitral valve. Posteriorly, down in the sinus of Valsalva, there was a fairly large vegetation which looked somewhat different from the ordinary rheumatic vegetation. It was larger, albeit firm, and had the same coloration except that it appeared to be erythematous. Microscopically, this is just a classic example of acute rheumatic pancarditis. In fact, it is just almost too good for rheumatic carditis. Sections from the mitral valve showed some thickening, suggestive of previous inflammatory reaction. There were aggregates of cells, that extended out to the surface of the valve. These, microscopically, made up a very characteristic lesion which we associate with rheumatic valvulitis. Along the endocardial surface, there were large deposits of fibrinoid material, some of which resembled the subcutaneous nodules of rheumatic fever, that is, a central core of hyaline material surrounded by a mononuclear cellular reaction. The lesion proj-



Figure 1.

ected into the lumen of the heart, although arising in the subendocardial tissues. There was evident also a diffuse degree of cellular infiltration.

"The myocardium proper showed a diffuse inflammation which varied somewhat from section to section. In areas, there were classic, if there is such a thing, Aschoff bodies. These consisted of a central mass of hyaline material and a surrounding component of cells. The larger cells, characteristic of the lesion, showed a central nuclear chromatin bar, comprising the Anitschkow's cells or owl-eyed cells. These lesions were present in vast numbers in all sections of the myocardium. In other areas, there were some aggregates of cells which formed pseudo-granulomata, with multinucleated cells. In other sections, there were arterioles with complete fibrinoid necrosis of their walls. This was associated with some destruction of muscle, and almost certainly was the cause of this patient's cardiac failure.

"As far as the lung itself was concerned, the left lung was almost solidly filled with blood. In almost every alveolus it appeared that the blood had undergone clotting and in some areas there were attempts at organization, or fibrosis. It is difficult for me to see how this patient had only blood-streaked sputum. I would have thought that hemoptysis might have been characteristic. In

other sections of the lung, notably from the right lung, there were, in addition, changes that one associates with rheumatic pneumonia. This is the alveolar hyaline membrane, in association with acute inflammation.

"We found no evidence of renal disease. As I mentioned, this is a fairly intriguing case, and the lesions are so good for rheumatic fever that one is prone to wonder about it. I must confess that I have no other name to give it, however. I am still somewhat reluctant to do so though, in the face of an ASO titer of 50 units. Even at the time of her first admission the ASO titer was only 125 units. If one believes, and I think there is overwhelming evidence to indicate so, that this is a disease in which there is antecedent streptococcal sore throat, and that the degree of severity of cardiac involvement is related to the duration of the convalescent state as well as the magnitude of the immune response to the streptococcus, then this child certainly does not fit into that category. The only point that comes up is the fact that she was treated with penicillin. Penicillin is known to alter the antibody response to streptococci, resulting in a lower immune titer, but, by the same token, treatment with penicillin has also been shown to reduce the incidence of recurrent or even primary rheumatic heart disease. Although morphologically this makes a very good rheumatic carditis, chemically, it does not quite fit into the group as far as I am concerned. However, I have no better name to give it. Perhaps you would like to comment on the ASO titer, Dr. Watson."

ASO TITER

Dr. Watson: "I don't think you can correlate the titer too well with the degree of activity. It depends on so many things including when the patient had her initiating streptococcal infection in relation to when you get the titer."

Dr. Brunson: "Well, nevertheless, she still should have had an elevated ASO titer if the secondary rheumatic attack was associated with secondary streptococcal infection."

Dr. Watson: "She had a history that ten days prior to the second referral she began to have swelling. She may have had an undetected streptococcal infection at an undetermined period of time before her second admission or it is possible that she never stopped having rheumatic fever although she remained clinically fairly well with her digitalis. I would agree with you and would think that she probably had an exacerbation, however. We do see children whose ASO titer is reported at 50 and some have even been reported as 0. In any given patient, it is probably more important to demonstrate a significant *rise* in ASO titer than merely to find an isolated high ASO titer. The initial ASO titer noted here for her was 125, and this may for her have been a significant rise from a previously undetermined level."

Dr. Brunson: "In which case 50 would not be very good indication of a recent infection.

Dr. Watson: "No, it would not be. But the ASO or any other indication of recent streptococcal infection such as a positive throat culture or a good history of recent streptococcal infection only constitutes a minor diagnostic criterion. Certainly the level of ASO titer doesn't correlate well with the presence or degree of rheumatic activity."

Dr. Brunson: "It correlates very well with the length of time that they have their titer though. The longer they have a high titer the more apt they are to get rheumatic carditis. I wonder whether one might be better off to study the antibodies produced to the M protein of the streptococcus?"

Dr. Watson: "Various variations like this have been suggested. Also protein electrophoresis is helpful and may show a rise in alpha 2 globulin. If we can leave the ASO, I would like to ask about this hemorrhagic change in the lung. This doesn't mean anything to me. Can you tell me what it means to you?"

Dr. Brunson: "It doesn't mean anything to me from the standpoint of classic rheumatic fever, although in a good many rheumatic patients there is a history of bleeding, usually epistaxis, but I had never seen it in the lung in this quantity. This whole business really suggests a hypersensitivity phenomenon, I must say. The lesions themselves really look more like what happens to a rabbit when it is given an overwhelming streptococcal infection in association with gram negative endotoxin. Those animals get hemorrhages in the lungs and they also get the vessel wall fibrinoid lesions such as one sees in this case. This is the reason I was making a point of the ASO titer—this may be actually a peculiar hypersensitivity phenomenon in this child and maybe not the classic rheumatic heart disease that we like to think about. Are there other questions or comments?"

Dr. Herbert G. Langford: "May I ask one question? I think we would have been a lot better off if we had had a repeat ASO titer. We are putting an awful lot on one laboratory determination."

Dr. Brunson: "Admittedly, a repeat ASO titer would have been helpful, as it is, we are going on one ASO titer from each admission.

Dr. Langford: "That was only about one degree off from what might have been significant, and all of us occasionally make a laboratory error. The second thing I would like to add is that it is my understanding that this disease is most of the time hypersensitivity due to infection of beta hemolytic streptococcus. Haven't there been other cases who have fit this same sort of picture where you could not incriminate it. Certainly in acute glomerulonephritis there are very well documented outbreaks of acute glomerulonephritis in which streptococcal infection could not be documented by any method."

Dr. Brunson: "Yes, I am not saying that this is not streptococcal heart disease—post streptococcal carditis. I am simply saying that the mechanism by which this lesion developed may be different from the ones that we ordinarily think of in rheumatic carditis."

Dr. Langford: "I think the evidence that acute rheumatic fever is post streptococcal disease is based on the general body of evidence."

Dr. Brunson: "Yes, but it is almost incontrovertible that unless there is antecedent streptococcal infection one will not get rheumatic fever."

★★★

2500 North State St.

'SO GOES THE GLORY . . .'

And then there was the physician's son, apt in his Latin studies, who watched the school bus get hopelessly bogged down in the heavy snow accumulated over the weekend.

With glee, he exclaimed: "Sick transit, glorious Monday!"

SPECIAL ARTICLE

The Individual: Focus of Freedom

C. P. CRENSHAW, M.D.
Collins, Mississippi

The 95th Annual Session marked the first time a MSMA president presented the traditional President's Address to the House of Delegates by long distance. Confined to his bed in Collins following a pulmonary embolism, Dr. C. P. Crenshaw spoke to the House over a special telephone hook-up provided by Southern Bell Telephone and Telegraph Company. In this opening speech of the annual session, he warns that physicians are challenged on three fronts including the American system of free choice, the extension and improvement of medical care by physicians, and the development of greater service capabilities by the state medical association.

THE CLIMATE in which professional services are rendered to the American public is unfriendly to the providers and paternalistic to the recipients. A century ago, such a statement would have amounted to sheer nonsense because American society was characterized by distinctive minimums of culture characteristic of a free people in an enlightened civilization. It could then be said that we were a society with a monotheistic religion, a system of laws, a representative republican government, a proper individual concern for health and well-being, growing technological achievement, a free and unfettered educational system, and private economic pursuits.

The 20th century has changed much of this. The pattern of government finds the constitution an embarrassing inconvenience. The individual concern for health is being shifted to the federal level. Technological growth is closely tied to a controlled economy. Methods of education have been altered toward a liberal and progressive process with attendant government subsidies and controls. Private economic pursuits are the business of government through confiscatory taxation and government is in business through subsidized competition.

When a medical organization convenes in annual session, the logical concerns before its body politic are those relating to the physician's knowledge, the growth of his skills, his armamentarium of drugs and technics, and his personal success as a practitioner.

The hour is too late for these essentials to command all our attention. The question before us in socioeconomic terms is not merely what system of medical care the United States shall have —it is also what sort of economy shall our nation adopt. The direction of government, the growing areas of federal responsibility, and the erosion of local autonomy are plainly suggestive of what we may expect.

Our chief concern must, therefore, be centered in the individual. As physicians, we ought to be the first to appreciate that the biological design of creation included no governments, no programs of subsidy, no usurious controls—just individuals occurring within a balance of nature.

We ought also to understand that the American concept was to give the individual the dignity, the freedom, and the opportunity which his being commands. It is neither the task nor the prerogative of government to succeed the individual in the business of living his life. He must

1962-63 President of the Mississippi State Medical Association.

Read before the House of Delegates, 95th Annual Session, Mississippi State Medical Association, May 13-16, 1963.

be, first of all, free to choose. He should choose what he will eat, what he will wear, where he will live, how he will work. He must be free to choose success or to choose failure.

But he is free to make these choices only for himself because others have the same rights of choice. Never, in this course of human events, should these choices be made for us, not by others and not by government.

The American medical profession has the duty and the obligation to be concerned about the quality and quantity of medical care available to those who choose to seek it. Physicians should and must be concerned about the circumstances under which this care is rendered. Since they alone can provide it, then they must also be free to make professional judgments. But it is also important to understand that a doctor of medicine is totally responsible for his judgment. He is responsible to his patient, to society, to his colleagues, and to himself. For any other circumstance to prevail is to assure that professional judgment and physician responsibility are thrown into an irreversible imbalance. Ultimately, the patient will suffer the tragic consequences which must follow.

HISTORY OF SOCIALISM

Welfarism and governmental paternalism aren't new. The Roman circus featured free bread and a tax-paid admission to blood sport. Henry IV of France promised his 16th century subjects a chicken in every pot. But it was left to Germany's Bismarck to bring middle-of-the-road socialism to bridge what might otherwise have been a difficult hiatus for the real welfare advocates of the 20th century who need fantastic sums of money for their purposes. He gave us social security.

Without this statutory vehicle, no nation has ever fallen into total socialism. And without socialization of personal services, no nation has ever been dubiously honored by possessing a comprehensive social security system.

Less than a decade elapsed between the enactment of social security in the United States and the first serious effort to include in it a full and total program of compulsory federal medical care. The first Wagner-Murray-Dingell-type legislation was introduced in the Congress in 1944, a politically strategic moment when the world was embroiled in the bloodiest war in history. The end of that chapter was written in 1951 when the American people rejected the proposal.

But the proponents were dedicated and far more astute than many believed. They reasoned with practiced logic that what they could not achieve in one sweeping act, they could obtain piecemeal. Moreover, they adopted no timetables because demography, government, and the economy were fertile soils in which to sow their seed. For these proponents of a total welfare state, the climate was good.

FIRST FORAND BILL

In 1957, the battle was again joined with the introduction of the first Forand bill, concerned only with medical care for the aged. Much preparation had been made for its appearance with amendments to the Social Security Act during the preceding eight years. The bill fared poorly but inroads had been made. In the next Congress, the story was much the same and a second Forand proposal was presented. This one was dignified with public hearings but it was defeated in committee.

Then came Forand's successors with the King-Anderson bill, also to hold the national spotlight with hearings. Its defeat came by the slimmest margin, a mere 2 per cent of the United States Senate. The present King-Anderson bill is a serious matter and its proponents are serious about their intentions of enacting it.

These remarks are neither specific as to the technical nature of these legislative proposals nor detailed as to objections to them. Rather, this is an attempt to underscore and place into perspective the long-term goals of those for whom the American concept of the individual apparently means so little. Nor are these remarks calculated to agitate and stampede by raising meaningless spectres. Listen to the words of the distinguished Hungarian political scientist and economist, Palyi:

> "In democracies, the welfare state is the beginning and the police state, the end. All modern dictators have at least one thing in common. They all believe in social security, especially in coercing people into governmentalized medicine."

What will be the meaning and usefulness of professionalism if government legislates quality and quantity minimums of service? How effective can American medicine be a score of years from today if government is to decide how drugs shall be developed and manufactured, who shall receive medical care and how much, how a hospital shall operate and where it shall be located, what constitutes disability and sickness?

And what of the individual? What of his God-given prerogatives and opportunities? And even if he has no concern about compulsory federal medical care, just how can this drain away more of his freedom?

Few Americans in civilian life would accept military medicine, however free it may seem. But if government pays the bill, it will not forever turn its head and look the other way when people abuse their health. The answer wasn't written by Orwell but it's clear enough for all to see.

For more than a year, it has been my belief that physicians are challenged on three fronts. The fiber and fabric of our free choice system has been and is on trial. We are challenged to extend and improve medical care, not because of inequities but because of the profession's aspirations for a more perfectly healthy nation. And we are challenged to prepare ourselves for greater service in greater depth as a state medical association. Ultimately, each physician-member must decide for himself how much he will do, how much he will contribute, and how urgent it is for these decisions to be made. ★★★

Crenshaw-Folse Clinic

ARTFUL DIAGNOSIS

When lecturing at the Yale University School of Medicine, Dr. K. D. Keele of Great Britain expressed the opinion that the Mona Lisa's mysterious smile indicated that she was pregnant. But a writer in the *New England Journal of Medicine* was of an opposite view: "To one unencumbered by the sophistication of obstetricians and historians, that smug, sly smile can have only one explanation—Mona Lisa has just discovered that she is *not* pregnant."

Radiologic Seminar XV: Embryoma of the Kidney (Wilm's Tumor)

ELMER J. HARRIS, M.D.
Jackson, Mississippi

THE MALIGNANT MIXED EMBRYOMA of the kidney (Wilm's tumor) constitutes 20 per cent of all malignant tumors occurring in children,[1] being the second commonest abdominal tumor encountered in the pediatric age group. It is formed from the mesodermal cell rests within the kidney itself. At the time of diagnosis the majority of the patients with embryoma of the kidney are completely asymptomatic,[2] and the mass is found either during routine physical examination or accidentally by the parents. Hematuria and dysuria[3] are uncommon. These tumors are initially encapsulated, but if the capsule is broken either before or during surgery, survival is considered unlikely. The prognosis is best if the tumor is found during the first year of life. Of those who do not survive, 85 per cent die within the first year and 95 per cent within the first two years following nephrectomy.[4] Metastatic spread is generally to the lungs.



Figure 1. There is minimal compression and fixation of the inferior calyx on the left from a small infiltrating mass.

DIFFERENTIAL DIAGNOSIS

Since the majority of abdominal masses in infants and children prove to be either neuroblastoma or Wilm's tumor, the correct diagnosis can usually be suspected from an excretory urogram. The main differential point is that the more common neuroblastoma is extrarenal while the Wilm's tumor is intrarenal.

The roentgen appearance of Wilm's tumor varies greatly in different cases, depending upon the size and position of the tumor in the kidney. When the tumor is small, plain films and urograms may be normal or may show very minimal compression of the calyces (Figure 1). Usually, however, there is major distortion of the pelvo-calyceal system (Figures 2 and 3). While a tentative diagnosis can frequently be made from roentgen findings alone, a biopsy or microscopic proof is necessary in the final analysis.

Treatment of Wilm's tumor is generally by nephrectomy, postoperative radiotherapy, and chemotherapy (actinomycin D). Gross and Neuhauser[5] have reported an overall survival rate of 47 per cent with it being recognized that this is a

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, Mississippi Baptist Hospital.



Wilm's tumor, the second commonest abdominal tumor encountered in the pediatric age group, is formed from the mesodermal cells within the kidney itself. The tumors are initially encapsulated, but if the capsule is broken either before or during surgery, survival is unlikely. The prognosis is best if the tumor is found during the first year of life. Of those who do not survive, 85 per cent die within the first year and 95 per cent within the first two years following nephrectomy. The authors discuss differential diagnosis and treatment.

Figure 2. Marked compression of the superior calyces by the large left upper pole mass is seen on this oblique excretory pyelographic film.



higher cure rate than the average recorded in the literature. Pulmonary metastases have been successfully treated with comfort to the patient for many years, either by irradiation or by radiation therapy and actinomycin D combined. ★★★

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Figure 3. Note the distortion of the entire calyceal system and displacement of the pelvis superiorly and medially by this tumor in the lower pole.



The President Speaking

'Opportunity for Duty'

JOHN G. ARCHER, M.D.
Greenville, Mississippi

TO ASSURE GOOD GOVERNMENT, everybody should be in politics. Recognizing that physicians are no exception, the association's Board of Trustees proposed organization of a state medical political action committee, a local counterpart to AMPAC, which was approved by the House of Delegates at the recent 95th Annual Session. As with AMPAC, the Mississippi Medical Political Action Committee, once created and made operational, will strive for improvement of government by encouraging physician activity in political affairs.

MissIMPAC can and will assist physicians, their wives, and others to a better understanding of political and governmental processes, just as it will provide an organizational means for more effective discharge of civic responsibility. Moreover, the state PAC can be a vehicle by which Mississippi physicians and others can extend their influence and assistance in concert with their colleagues throughout the nation in quest of these meritorious goals. Obviously, it will be helpful in assuring continuation of good government in Mississippi.

Political action committees are nothing new. Nearly everyone has heard of labor's COPE. Medicine's national political arm, AMPAC, is a success in its own right. Forty-eight state medical associations have sponsored PAC's and Mississippi's will follow these proven patterns within the framework of our policies and requirements. Nonpartisanism is an essential characteristic of a PAC because support of individual candidates is based upon the position of each on issues of importance to the group.

Mississippi's PAC will be voluntary as to membership and participation. The House of Delegates specified that no dues increase be made in its interest. It will be legally and entirely separate from MSMA but physicians will direct its activities. MissIMPAC will offer physicians, their wives, and others an opportunity for the discharge of citizenship's highest duty: to make government better by participating actively in its processes. ★★★

Constitution and By-Laws of the Mississippi State Medical Association

CONSTITUTION

Preamble

That more may live longer in the richness and comfort of health; that pain, suffering, and disease may be eradicated to the extent made possible by scientific medical knowledge; that the standards of the medical profession may be maintained on the highest plane of honor, we dedicate ourselves as physicians through this Association. Among us, membership is a privilege, earned by professional qualification, personal honor, and selfless service; it is not a right vested superficially nor by statutory licensure. Truth shall be our quest; diligence, our staff; and service, our purpose.

Article I

NAME OF THE ASSOCIATION

The name and title of this Association shall be the Mississippi State Medical Association.

Article II

PURPOSE OF ORGANIZATION

The purpose of this Association shall be to federate and bring into one compact organization the entire medical profession of the State of Mississippi and to unite with similar associations in other states to form the American Medical Association, with a view toward the extension of medical knowledge, and to the advancement of medical science; to the elevation of the standard of medical education, and to the enactment and enforcement of just medical laws, to the promotion of friendly intercourse among the physicians and to guarding and fostering of their opinion in regard to the great problems of medicine, so that the profession shall become more honorable and capable within itself, and more useful to the public in the prevention and care of disease, and in the prolonging of and adding comfort to life.

The purpose of this Association shall be to promote scientific medical research and practice and shall be a non-profit organization.

Article III

COMPONENT SOCIETIES

Component Societies shall consist of those societies which hold charters from the Association.

Article IV

MEMBERSHIP

Section 1. Members of the Mississippi State Medical Association. Members shall be active, associate, emeritus, or scientific, according to requirements and provisions of the By-Laws. There may also be invited guests. All degrees of membership other than associate and scientific shall be construed as active in connection with the rights and privileges accruing therefrom.

Section 2. Guests. Any physician not a resident of the state may become a guest during any annual session upon invitation of a member of the Association, and shall be accorded the privilege of participating in all the scientific work of that session.

Article V

SESSIONS AND MEETINGS

Section 1. The Association shall hold an annual session during which there shall be held daily not less than two general meetings, which shall be open to all registered members and guests.

Section 2. The time and place for holding the annual session shall be fixed by the House of Delegates, but in emergencies, the Board of Trustees shall have the power to fix, or change, either the time or the place, or both of the annual session.

Article VI

GENERAL OFFICERS

Section 1. The general officers of this Association shall be a President, President-elect, three Vice-Presidents, one from each Supreme Court District, Secretary-Treasurer, Speaker, Vice Speaker, and Editor.

Section 2. The President, President-elect, and Vice-Presidents shall hold terms of one year. The Secretary-Treasurer, Speaker, Vice Speaker and Editor shall be elected for terms of three years.

Section 3. The officers of this Association shall be elected by the House of Delegates on the last day of the annual session following the adjournment of the general meeting, but no person shall be elected to any such office who has failed to attend two-thirds of the past two and current annual sessions and who has not been a member for the past two years.

Section 4. In addition to these general officers, there shall be an Executive Secretary who need not be a physician or member of the Association. He shall be appointed by the Board of Trustees and shall serve at the pleasure of the Association. His compensation and expenses for duties performed shall be fixed by the Board of Trustees and confirmed by the House of Delegates.

Article VII

EXECUTIVE OR CENTRAL OFFICES

The Executive Secretary shall maintain in the city of Jackson suitable offices for the discharge of his duties and for conducting the administrative affairs of the Association.

Article VIII

HOUSE OF DELEGATES

The House of Delegates shall be the legislative, business, and policy-making body of the Association and shall consist of (1) delegates selected by the component societies under authorized apportionment, (2) the general officers of the Association, (3) all past presidents, provided they still be members in good standing of the Association, (4) members of the Board of Trustees and

Councils, and (5) elected committees, Delegates and Alternate Delegates to the American Medical Association, members of the State Board of Health, and members of the Board of Trustees of Mental Institutions, all of whom must be members of this Association.

Article IX

BOARD OF TRUSTEES

The Board of Trustees shall be the executive and governing body of the Association during vacation of the House of Delegates and shall perform such duties as are prescribed by law governing directors of corporations and in the By-Laws of the Association. The Board shall consist of nine members, one from each Association District, elected for terms of three years each. A Trustee shall not serve more than three consecutive terms.

Article X

FUNDS AND EXPENSES

Funds for meeting the expenses of the Association shall be arranged for by the House of Delegates by annual dues, per capita assessments upon the membership, and by voluntary contributions. Funds may be appropriated by the House of Delegates to defray the expenses of the annual session, publications, and for any other purpose approved by the House of Delegates.

Article XI

THE SEAL

The Association shall have a common Seal with power to break, change or renew the same at pleasure.

Article XII

AMENDMENTS

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at the annual session, provided that such amendment shall have been presented in open meeting at the previous annual session, and that it shall have been sent officially to each component society at least two months before the session at which final action is taken.

BY-LAWS

Chapter I

MEMBERSHIP

Section 1. Eligibility. Each component society of the Mississippi State Medical Association shall judge the qualifications of candidates for election to membership therein, which shall be restricted to those persons who hold the degree of Doctor of Medicine from an appropriately accredited source as defined by the American Medical Association, or in lieu thereof, a foreign degree in medicine which is an acceptable equivalent to the Board of Trustees and shall be a citizen of the United States. All candidates for any degree of membership other than associate must be legally licensed to practice medicine in Mississippi. Persons who obtained this degree prior to January 1, 1917, need not comply with this requirement but must be licensed to practice medicine in Mississippi or, if offering to practice in Mississippi must be eligible for license by reciprocity and be a member in good standing of a constituent (state) association of the American Medical Association. Membership in a component society, evidenced by the payment of dues for the current year, shall be a prerequisite to membership in the Association, except that a physician upon his initial application for membership in a component society of the Association shall be required to undergo a waiting period of ninety (90) consecutive days from the date he begins the practice of medicine in the geographical area of the component society before he may be elected to membership in the component society. No physician shall be eligible for membership who has been convicted of or who has plead guilty to either a felony or a violation of a state or federal narcotics law. The duly certified court record shall be *prima facie* evidence of pleas and convictions and cause automatic revocation of membership.

Section 2 (a). Good Standing. Only those members in good standing shall be entitled to the rights and privileges of membership. A physician not in good standing may not be elected to office nor exercise the privilege of voting or attending any session of this Association, scientific or otherwise. The name of a physician upon the properly certified roster of a component society which has paid its annual assessment shall be *prima facie* evidence of his right to register at the annual session of the Mississippi State Medical Association. No member shall participate in any of the proceedings of the annual session until he is duly registered. No delegate or other member shall take part in any of the proceedings of an annual session until he has compiled with the provisions of this section. (b) Change of State Residence. In the event that a member moves from the State, his membership shall continue until, and lapse at the end of, the current fiscal year, but this provision shall not operate to prevent a physician who moves from the state continuing his membership by payment of all dues and assessments to the state Association. (c) Obligations of Membership. When the Executive Secretary of the Mississippi State Medical Association is officially informed by the secretary of a component society that a physician is not in good standing in the component society, he shall remove the name of the physician from the rolls of the Association. A member shall hold his membership through the component society in the jurisdiction of which he practices, provided that a physician living on or near a county line may hold membership in the society most convenient for him to attend. If the society in which he chooses to secure membership does not exercise jurisdiction over the area of his residence, then permission must be obtained from the jurisdiction society to facilitate his affiliation with the extra-jurisdiction society.

Section 3. Degrees of Membership. Members of the Mississippi State Medical Association shall be divided into the following classifications: Active, emeritus, associate, and scientific. (a) Active Membership. Active members shall include all eligible members of component societies in good standing, providing that all dues and assessments in this Association as may be hereinafter prescribed have been received by the Association. (b) Emeritus Members. Any member of the Mississippi State Medical Association who has been an active member for any ten consecutive years and shall have permanently retired from the practice of medicine shall be eligible for election to emeritus membership. Election to emeritus membership for reason of retirement in the case of permanent and total disability shall merit special consideration but shall be subject to ruling by the Board of Trustees. Election to emeritus membership shall be based on the recommendation of the component society and the approval of the Board of Trustees. (c) Associate Membership. Any commissioned medical officer in the United States Army, United States Air Force, United States Navy, or United States Public Health Service, or any physician in the employ of the Veterans Administration, not licensed to practice in the State of Mississippi, stationed in Mississippi, members of medical faculties of medical schools in Mississippi, approved by

the American Medical Association, who are not licensed to practice in the state, any hospital intern, or any hospital resident in Mississippi, may, on election to associate membership by the component society in whose jurisdiction the physician resides become an associate of the Mississippi State Medical Association. Associate members shall not vote or hold office. (d) Scientific Membership. Physicians meeting the professional qualifications set forth in Chapter I, Section 1, may be elected scientific members by component societies. The rights and privileges of scientific membership shall be limited to participation in the scientific work of the association and such members shall not vote or hold office. Scientific members shall pay no dues to component societies or the state Association. In addition to these provisions, the privileges of scientific membership shall be subject to rulings of the Board of Trustees.

Section 4. Dues and Assessments. A per capita assessment determined by the House of Delegates shall constitute the dues of the Association, which assessment shall be collected from all active members by the respective secretaries of the component societies, provided that new members shall be accepted on payment of three-fourths of annual dues after May 1 and one-half of annual dues after September 1. Each active member shall pay the prescribed dues to the officer designated by the component society for transmittal to the Executive Secretary of the Association. Dues shall include a subscription to the official publication of the Association. (a) Members Excused From Payment. The Board of Trustees may, by majority vote, excuse a member from payment of dues because of undue hardship or similar circumstances warranting special consideration provided that the component society shall have excused in full the payment of dues for periods exceeding one year. Such circumstances shall be interpreted to include extended illness and temporary disability. (b) Emeritus Members. Physicians who have been elected emeritus members shall not be required to pay dues in the Association. (c) Payment of Dues and Delinquency. Dues of the Association are due and payable on December 31 of the year prior to that for which dues are prescribed. Failure to pay dues by April 1 of the year for which due shall result in forfeiture of membership privileges and the removal of the member's name from the rolls of the Association. A five dollar ($5.00) reinstatement cost shall be assessed against any member who is delinquent by reason of non-payment of dues after April 1 of the year for which dues are payable. A member in good standing who is called to active duty with the Armed Forces of the United States other than in the regular component shall be carried as an active member without payment of dues until such time as he is released from military service; receipt of publications of the Association during such period shall be at the expense of the member.

Section 5. American Medical Association. Members of this Association shall pay the dues or hold a legal exemption from the dues of the American Medical Association. These dues shall be paid through the component society to the Executive Secretary of the Mississippi State Medical Association, whose duty it shall be to transmit them to the American Medical Association and to obtain proper credits and receipts therefor.

Section 6. Revocation of Emeritus or Associate Membership. Any emeritus or associate membership may be revoked by two-thirds vote of the House of Delegates when, in the opinion of the House of Delegates, the conduct or actions of the emeritus or associate member violates any of the principles of the code of ethics or whose conduct or actions are not becoming to the honor conferred.

Chapter II

ANNUAL AND SPECIAL SESSIONS

Section 1. Time and Place. An annual session shall be held as required by Article V, Section 1, the Constitution of the Mississippi State Medical Association, which session shall in any event be held prior to the annual session of the American Medical Association. The place of the state session shall be fixed in accordance with Article V, Section 2, the Constitution of the Mississippi State Medical Association.

Section 2. Special Session. A special session of the Association or of the House of Delegates may be called by the President, with the approval of the Board of Trustees. The Board of Trustees is empowered to call a special session by majority concurrence.

Section 3. Inviting an Annual Session. A component society desiring the Association and House of Delegates to meet in annual session in a city within its jurisdiction may submit an invitation in writing or verbally through its representative to the House of Delegates at the annual session concerned with the selection of the site for the next regular scheduled meeting. The dates and site of the annual session selected may be changed by majority vote of the Board of Trustees in an emergency requiring such a change.

Section 4. Registration Privileges. Only the following shall be permitted to register at any session:

(a) Active members
(b) Emeritus members
(c) Associate members
(d) Invited guests
(e) Medical students of American Medical Association approved medical schools who are certified to the Executive Secretary of the Association by their respective deans.
(f) Interns and residents who are graduates of American Medical Association approved medical schools and who are connected with an approved hospital and who are certified to the Executive Secretary of the Association by their respective hospital superintendents in event they are not associate members of the Association.
(g) Commissioned medical officers of the United States Armed Forces who are on active duty and who if not associate members are certified to the Executive Secretary by their Post or Base Surgeons or Commanding Officers.
(h) Scientific members.

Section 5. Indebtedness. A member shall not be permitted to register unless all current indebtedness to both the Association and component of proper jurisdiction has been paid.

Section 6. Admittance. Admittance to any meeting of the House of Delegates, any scientific section, or any of the various exhibits at an annual session of the Association shall be limited to members in good standing, duly registered and invited guests, members in good standing of the Woman's Auxiliary to the Mississippi State Medical Association, duly accredited and registered members of the Press, and accredited technical and scientific exhibitors.

Chapter III

GENERAL MEETING

Section 1. Participation. The general meeting shall include all registered members and guests, who shall have equal rights to participate in the proceedings and discussions, but no member shall vote on any question coming before a section of the general meeting except those who have registered as members of such sections. Each section of the general meeting shall be presided over by its chairman. The address of the President and the Distinguished Service Oration shall be delivered before the general meeting at such time and place as may be arranged.

Section 2. Order. The order of exercise, papers, and discussions as set forth in the official program shall be followed from day to day until it has been completed. But no section shall be allowed to place more than five papers on its program, nor more than two invited guest essayists (out-of-state or non-member). When a section program is not completed within the time assigned, it

shall not be allowed to continue into that assigned to another section.

Section 3. Time Restrictions. No address or paper before the Association, except those of the President and Orator, shall occupy more than twenty minutes in its delivery, except that guests may be allowed thirty minutes; and in formal discussion no one shall speak more than five minutes; and in informal discussion no one shall speak more than three minutes and not more than one time.

Section 4. Essayists. With the exception of the invited guests, the essayists must be members of the Association. No name shall appear more than once on the printed program to discuss a paper before the regular scientific sections unless such person qualifies for membership as provided in these By-Laws.

Section 5. Papers. All papers read before the Association shall be its property. Each paper must be read by its author, and must be deposited with the Secretary when read.

Section 6. Failure to Read Paper. No author listed on the program who fails to read a paper at the session may be allowed a place on the program of the next annual session, but if the author, being unable to attend, shows his good intent by forwarding his paper to the Secretary before the annual session, he shall not suffer the penalty.

Chapter IV

SCIENTIFIC SECTIONS

Section 1. Designation of Sections. The scientific sections of the Association shall be as follows: (a) Section on Medicine, (b) Section on Surgery, (c) Section on Preventive Medicine, (d) Section on Eye, Ear, Nose and Throat, (e) Section on Pediatrics, (f) Section on Obstetrics and Gynecology, and (g) Section on General Practice.

Section 2. Section Officers. Each scientific section of the Association shall, as the last order of business during its regular meeting, elect a chairman and secretary who shall serve for a period of one year. A majority of votes cast shall be necessary to elect.

Section 3. Program. The Council on Scientific Assembly shall place any paper in its proper section. The Council shall so arrange the program that no one section shall be given precedence over others two years in succession.

Chapter V

HOUSE OF DELEGATES

Section 1. Apportionment and Representation. Each organized county shall be entitled to representation in all regular and special sessions of the House of Delegates, one delegate and one alternate for each fifty members in the county and one delegate and one alternate for each fraction thereof, but each organized county holding a charter from this organization having made its annual report and paid its assessments, as provided in this Constitution and By-Laws shall be entitled to at least one delegate and alternate, said alternate delegates to act only in the absence of the delegate or delegates from the respective counties. No county in a component society shall be without representation in the House of Delegates; each shall be entitled to one delegate and one alternate without regard to total membership. No alternate may be seated at any regular or special session of the House of Delegates unless the delegates elected from that county shall be absent or otherwise unable to participate in the proceedings. In the event that neither the delegate nor the alternate is able to attend the regular or special session to which they have been accredited, then any *bona fide* resident of the county may, if properly registered, qualify himself as a delegate. No representative of the component society shall be seated in the House of Delegates until all his dues, assessments, and obligations to the component society have been paid. Delegates and alternates shall be elected by their respective component societies for terms of not less than two years and shall assume office on the first day of the annual session following their elections; they shall be *bona fide* residents of the counties which they represent. Their names shall be reported to the Central Office of the Association not later than thirty days prior to the first day of the annual session. Representatives of component societies shall be seated in the House of Delegates only following their proper registration of credentials from the component societies they represent.

Section 2. Meetings and Attendance. The House of Delegates shall meet annually on the first day of the annual session of the Association, and there shall be at least one scientific meeting scheduled for that day. The House of Delegates shall meet for the conclusion of business on the last day of the annual session immediately following the adjournment of the last general or scientific session, provided that these requirements shall not operate to prevent such other meetings of the House of Delegates during the annual session as the House itself may order or the President or Speaker may deem necessary, but no such meetings may be called at times which would conflict with the scheduled general or scientific session. Duly registered members and guests may attend all meetings of the House of Delegates provided that they occupy a distinctly separate section of the meeting hall or auditorium and further provided that they shall not be permitted to participate in any phase of the meeting of the House of Delegates except on invitation of that body. By majority vote, the House of Delegates may enter into executive session, during which time only qualified delegates and officers of the Association may remain in attendance.

Section 3. Quorum. A three-fifths majority of registered and duly seated delegates of this Association shall constitute a quorum.

Section 4. Order of Business. The order of business shall be conducted at the pleasure of the House of Delegates, provided it shall not be in conflict with either these By-Laws or the Constitution. Meetings shall be conducted according to *Robert's Rules of Order, Revised,* and within the bounds of courtesy and this Constitution and By-Laws. Generally, the order of business shall be:

(1) Adoption of the Transactions of the previous meeting.
(2) Reports of Boards, Councils and Committees.
(3) Reports of Presidential Committees.
(4) Special Orders.
(5) Unfinished Business.
(6) New Business.

Section 5. Memorials and Resolutions. No memorials or resolutions shall at any time be issued in the name of the Mississippi State Medical Association by any officer or member thereof until such memorial or resolution has been approved and adopted by the House of Delegates or Board of Trustees.

Section 6. Duties and Responsibilities. It shall, through its officers and otherwise, give diligent attention to foster the scientific work and spirit of the Association, and shall constantly study and strive to make each annual session a stepping stone to future ones of higher interest. It shall consider and advise the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation and to diffuse popular information in relation thereto. It shall make careful inquiry into the condition of the profession of each county in the state, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in the counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality, and shall continue these efforts until every

physician in every county in the state has been brought under medical society influence. It shall encourage post-graduate work in medical centers, as well as home study and research, and shall endeavor to have the results utilized and intelligently discussed in the component societies. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body, the term of office to begin on January 1 of the year following that of the elections and continuing for two successive years. It shall, upon recommendation of the Board of Trustees, provide and issue charters to counties organized to conform to the spirit of the Constitution and By-Laws.

Section 7. Reference Committees. Business brought before the House of Delegates will normally be referred by the Speaker for hearing, debate, and recommendation to a reference committee. Sufficient reference committees shall be appointed by the President to expedite and assist in the deliberations of the House of Delegates. Such committees shall consist of not less than three nor more than five members, all of whom shall be members of the House of Delegates, who shall serve only during the regular or special session for which appointed. Any member of the Association shall have the privilege of appearing before a reference committee on any issue being considered. Additionally, reference committees may permit the appearance of any individual who, in the opinion of the committee, can assist its deliberations.

Chapter VI

ELECTION OF OFFICERS

Section 1. Ballot. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect.

Section 2. Nominations. The House of Delegates on the first day of the annual session shall select a Committee on Nominations consisting of nine members of the House of Delegates, one from each Association District. It shall be the duty of this committee to consult with the members of the Association and to hold one or more meetings at which the best interests of the Association and of the profession of the state for the ensuing year shall be carefully considered. The committee shall nominate to the House of Delegates three names for each general officer vacancy and two names for all other offices. No two candidates for President-elect may be named from the same county. Nominations for appointment to membership on the Mississippi State Board of Health shall be made by the House of Delegates in accordance with Section 7024, Mississippi Code of 1942, provided that six names shall be submitted, three of whom shall be elected and their names submitted to the Governor as nominees from each district, provided no member shall be nominated who has served two consecutive terms. The House of Delegates shall nominate five physicians when vacancies occur on the Board of Trustees of Mental Institutions which nominations shall be submitted to the Governor in accordance with law.

Section 3. Report of Nominations. The House of Delegates shall receive the report of the Committee on Nominations and elect officers, Trustees, and Council members on the last day of the annual session.

Section 4. Nominations from the Floor. Nothing in this Chapter shall be construed to prevent additional nominations being made from the floor by members of the House of Delegates.

Section 5. Executive Secretary. The Board of Trustees shall select and appoint an Executive Secretary as elsewhere prescribed in the Constitution and By-Laws of the Association.

Chapter VII

DUTIES OF OFFICERS

Section 1. President. The President shall have general supervision over all meetings of the various bodies of the Association, shall appoint all committees not otherwise provided for, shall deliver an annual address at such time and place as may be arranged, and shall perform such other duties as custom and parliamentary usage may require. He shall fill by appointment all vacancies occurring during his tenure of office among the general officers and on the Board of Trustees and Councils and shall be empowered to appoint such committees on an *ad hoc* basis as may be desired or required to conduct the affairs of the Association. He shall be an *ex officio* member of all Councils and committees. He shall be the real and acknowledged head, as well as the personal representative, of the medical profession of the State of Mississippi during his term of office, and insofar as practicable, shall visit by appointment the various sections of the state and the component societies of the Mississippi State Medical Association and assist the Trustees in their tasks of aiding and strengthening the component societies and in making their work more useful.

Section 2. President-elect. The President-elect shall be in charge of the work of organization, including membership, under the direction of the President, and shall exercise these duties and advise with the Vice Presidents and with the Board of Trustees in this phase of their activity. He shall be an *ex-officio* member of all Councils and committees. He shall succeed to the presidency upon the event of the death, resignation, or removal from office of the President. This automatic succession shall not operate to disqualify him from serving the next regular term of office unless he has served more than six months as President.

Section 3. Vice Presidents. The Vice Presidents shall assist the President in the discharge of his duties. They shall further assist the President-elect in the work of organization, including membership in their respective areas, and in promoting the welfare of the Association and the profession of the state.

Section 4. Speaker. A Speaker shall be elected for a term of three years. This officer may be chosen from the membership of the Association, irrespective of any affiliation with the House. The Speaker shall familiarize himself with the rules and usages of parliamentary procedure, with the laws of the House. On him shall devolve the duty of bringing before the House through the various officers and chairmen all reports and other matters that are to receive its attention. He shall preside at all meetings of the House and perform the duties usual to the position and office of chairman except in the appointment of committees, which shall be the privilege of the President.

Section 5. Vice Speaker. A Vice Speaker shall be elected for a term of three years to run concurrently with that of the Speaker. The Vice Speaker shall assist the Speaker in all duties prescribed in these By-Laws.

Section 6. Secretary-Treasurer. The Secretary-Treasurer shall be elected for a term of three years. He shall perform such duties ordinarily devolving on a secretary of a corporation by law, custom, or parliamentary usage and shall enjoy the rights and perform such other duties as may be granted or imposed in the Constitution and these By-Laws. He may delegate such duties as are herein described to the Executive Secretary who shall be responsible therefor. He shall be an *ex-officio* member of all Councils and committees.

Section 7. Executive Secretary. The Executive Secretary shall be appointed by the Board of Trustees and shall serve at the pleasure of the Association. He need not be a member of the Association nor a physician. He shall maintain a Central Office for the Association and shall be responsible for the management and proper functioning of the Central Office to the President of the Association and the Board of Trustees. He shall attend all sessions and meetings of the Association, the House of Delegates, the Board of Trustees, and shall serve at all times to perform such other duties as may be deemed beneficial to the Association by the President and Board of Trustees. He shall assist elected officers, Councils, committees, and Trustees in the performance of their duties. Under instructions from the President, he shall conduct a com-

prehensive program of public education and all such other activities as may disclose favorably to the public at large the aims, objectives, and goals of service of the medical profession in Mississippi. He shall, when requested, place himself in position to assist any of the component societies of the Association and he shall attend meetings of the component societies when invited by officers thereof. He shall be made custodian of records, books and papers belonging to the Association and he shall keep account of and promptly place under the supervision of the Secretary-Treasurer such funds as may be delivered into his hands in the name of the Association. He shall give bond at the expense of the Association in such amount as may be required. He shall provide for the registration of the members and delegates at the annual session and cooperate in preparing for and arranging all functions of the Association, including the annual session. He shall procure an exact transcript of all proceedings of the House of Delegates. He shall maintain a register of all legal practitioners in Mississippi and he shall maintain detailed and exact records of the membership with regard to component societies, the Mississippi State Medical Association, and the American Medical Association. He shall issue evidence of membership to each physician who pays the annual assessment and is accepted in the Mississippi State Medical Association. He shall maintain close and complete liaison with the American Medical Association and shall keep the component societies informed of activities, programs, and mandates of both the state Association and the American Medical Association. He shall publish from the Central Office such memoranda, bulletins, and miscellaneous publications as may be directed by the President, the Board of Trustees, and the House of Delegates. He shall conduct the official correspondence of the Association as he may be directed. He shall employ such assistants as may be required, upon authorization of the Board of Trustees. He shall supply each component society with blank forms to be used in connection with membership and reports. He shall maintain records of monies paid by the component societies for assessments and dues. He shall prepare and publish under the direction of the President and Board of Trustees such programs as may be necessary for official functions of the Association. He shall be reimbursed for expenses incurred in the performance of his duties, separately and in addition to his regular compensation.

Chapter VIII

BOARD OF TRUSTEES

Section 1. Board of Trustees. The Board of Trustees shall be the executive and governing body of the Association during vacation of the House of Delegates. It shall consist of nine members, one from each Association District, where terms of office shall be three years and so arranged that only three members are elected annually. A Trustee shall not serve more than three consecutive terms. During vacation, the Board of Trustees shall exercise the powers conferred upon the House of Delegates by the Constitution and these By-Laws, provided that in the exercise of these powers thus conferred, the Board of Trustees shall neither consider nor act to contravene any action, mandate, or policy of the House of Delegates which may still be in effect.

Section 2. Officers of the Board. The Board of Trustees shall elect from its membership a Chairman, a Vice Chairman, and a Secretary for terms of one year during the last day of the annual session following adjournment of the House of Delegates. These officers of the Board shall compose its Executive Committee. The duties of the Secretary may be delegated to the Executive Secretary who shall maintain such special records and transcripts of meetings as the Board may desire.

Section 3. Meetings of the Board. The Board of Trustees shall meet daily during the annual session of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of any three members of the Board.

Section 4. Executive Committee. The Executive Committee of the Board of Trustees shall be empowered to act in behalf of the Board on all matters delegated to it by majority vote of the Board. The acts of the Executive Committee, however, shall be subject to confirmation by the Board.

Section 5. Reports of the Board of Trustees. The Board of Trustees shall make an annual report to the House of Delegates and such supplemental reports as necessity may require at a time designated in the regular transaction of the business of the House. The report shall be made by the Chairman, the Vice Chairman, the Secretary, or the Executive Secretary. The reports of the Board shall be made a portion of the annual transactions and proceedings of the Association.

Section 6. Duties of Trustees. Each Trustee shall be organizer and arbiter for his Association District. He shall visit the component medical societies within his District during each year and shall make an annual report of his activities and of the condition of the medical profession of each county of his District. Each Trustee shall be reimbursed for expenses incurred by him in traveling within his District or attending special meetings in the performance of his official duties, which will be allowed upon presentation of an itemized and documented account. This provision shall not be construed to include his expenses in attending the annual session of the Association.

Section 7. Public Policy. The Board of Trustees shall have the right to communicate the views of the medical profession and of the Association in the State of Mississippi with regard to matters of medical science, health, sanitation, and allied spheres of activity. It shall approve all memorials and resolutions issued but shall not issue memorials and resolutions heretofore prohibited in these By-Laws.

Section 8. Association Districts. The State of Mississippi shall be subdivided into Association Districts by counties, provided that all counties in a component society shall be in one Association District. These districts are defined as follows:

District 1: Bolivar, Coahoma, Humphreys, Leflore, Quitman, Sunflower, Tallahatchie, Tunica, and Washington.
District 2: Benton, DeSoto, Lafayette, Marshall, Panola, Tate, Tippah, Union, and Yalobusha.
District 3: Alcorn, Calhoun, Chickasaw, Clay, Itawamba, Lee, Lowndes, Monroe, Noxubee, Oktibbeha, Pontotoc, Prentiss, and Tishomingo.
District 4: Attala, Carrol, Choctaw, Grenada, Holmes, Montgomery, and Webster.
District 5: Hinds, Issaquena, Leake, Madison, Rankin, Scott, Sharkey, Simpson, Smith, Warren, and Yazoo.
District 6: Clark, Kemper, Lauderdale, Neshoba, Newton, and Winston.
District 7: Covington, Forrest, George, Greene, Jasper, Jefferson Davis, Jones, Lamar, Marion, Pearl River, Perry, and Wayne.
District 8: Adams, Amite, Claiborne, Copiah, Franklin, Jefferson, Lawrence, Lincoln, Pike, Walthall, and Wilkinson.
District 9: Hancock, Harrison, Jackson, and Stone.

Chapter IX

COUNCILS

Section 1. Councils. Councils of the Association shall be elected standing bodies of the House of Delegates, responsible thereto. There shall be a Council on Medical

Service, a Council on Scientific Assembly, a Judicial Council, a Council on Constitution and By-Laws, a Council on Legislation, a Council on Budget and Finance, an Editorial Council, and a Council on Medical Education. A Council member shall not serve more than three consecutive terms.

Section 2. Council on Medical Service. The Council on Medical Service shall be charged with the responsibilities of ascertaining and studying all aspects of medical care in Mississippi. It shall examine and make available all facts, data, and opinion on timely and adequate medical care. It shall investigate social and economic aspects of medical care and report its evaluations and findings. It shall suggest means of distribution of adequate quality medical service to the public consistent with the policies of the Association. It shall act as a factfinding and advisory body of the Association. Under its jurisdictions, there shall be assigned the activities of the Association in medical service, emergency service programs, indigent care, and allied medical agencies. There shall be one member from each Association District elected for a term of three years and so arranged that only three members shall be elected for full terms each year. The Council on Medical Service shall appoint Committees on Cancer Control, Occupational Health, Federal Medical Services, Maternal and Child Care, Mental Health, Diseases of the Heart, and Aging. Each committee shall consist of not less than five nor more than seven members appointed for periods of not less than one nor more than three years.

Section 3. Council on Scientific Assembly. The Council on Scientific Assembly shall be composed of the Secretary-Treasurer and the chairmen of the several scientific sections. The Secretary-Treasurer shall be Chairman of the Council. Upon this Council shall devolve the duties and responsibilities of planning the annual session to include all scientific activity and the programming and scheduling of annual session events. The Council shall be empowered to appoint such committees for terms not to exceed one year as may be necessary to assist in the discharge of these duties.

Section 4. Judicial Council. The Judicial Council shall consist of nine members elected for terms of three years each, one from each Association District. The judicial powers of the Association shall be vested in this Council whose decision shall be final. The Council shall have jurisdiction in all questions involving membership in the Association, all controversies arising under the Constitution and these By-Laws, interpretation and application of the Principles of Medical Ethics of the American Medical Association, controversies between two or more component societies of the Association and among members of the Association. The Council shall have appellate jurisdiction in questions and controversies referred to the state Association by appropriate and authorized bodies of component medical societies. Appeals shall be perfected within six months following the date of decision by the constituted authority of the component society. The Council, under these several authorities, may conduct such hearings as may be necessary and after due and legal processes may, by majority opinion, censure, suspend, or expel any member for infraction of the Constitution or these By-Laws.

Section 5. Council on Constitution and By-Laws. The Council on Constitution and By-Laws shall consist of three members elected by the House of Delegates for terms of three years each. To this Council shall be referred all suggested amendments and changes in the Constitution and By-Laws of the Association for recommendation to the Board of Trustees and House of Delegates.

Section 6. Council on Legislation. The Council on Legislation shall consist of nine members, one from each association district, elected by the House of Delegates for terms of three years each which are so arranged that three members are elected annually. This Council shall analyze proposed legislation, recommending to the Board of Trustees courses of action for securing laws in the interests of public health, scientific medicine, as well as medical practice. It shall study and report the need for new and remedial legislation designed to serve the best interests of the state and nation. This Council shall be responsible to the Board of Trustees.

Section 7. Council on Budget and Finance. The Council on Budget and Finance shall consist of three members elected by the House of Delegates for terms of three years each. This Council shall receive reports of the finances of the Association and to it shall be referred all matters pertaining to the annual budget. The Council shall report annually to the House of Delegates, making specific recommendations on the annual budget of the Association. This Council shall be responsible to the Board of Trustees.

Section 8. Editorial Council. The Editorial Council shall consist of the Editor and the Associate Editors, elected by the House of Delegates to serve two years, and the former shall serve as chairman. To this Council shall be referred all reports of scientific subjects and all scientific papers and discussions presented before the Association and its component societies. The Council shall consider for publication in the official organ of the Association such papers, reports, and other data as may serve to further and advance scientific medicine in Mississippi. It shall exercise editorial authority over the official organ of the Association. This Council shall be responsible to the Board of Trustees.

Section 9. Council on Medical Education. The Council on Medical Education shall consist of three members elected by the House of Delegates for terms of three years each. To this Council shall be assigned the responsibilities of encouraging undergraduate and postgraduate study of medicine, licensure, and facilities for medical education in the state. This Council shall be responsible to the Board of Trustees.

Chapter X

COMMITTEES OF THE BOARD OF TRUSTEES

Section 1. Committees of the Board of Trustees. Standing committees of the Board of Trustees shall consist of the Advisory Committee to the Medical Auxiliary, Grievance Committee, and the Committee on Publications. All committees of the Board of Trustees shall be appointed by the Board for terms specified unless their selection is otherwise prescribed.

Section 2. Advisory Committee to the Medical Auxiliary. The Advisory Committee to the Medical Auxiliary shall consist of three members appointed for terms of three years each. The committee shall be charged with the responsibility of advising the Woman's Auxiliary to the Mississippi State Medical Association on matters of organization and program activity relating to the supportive role of the Auxiliary in its work with the Association.

Section 3. Grievance Committee. The Grievance Committee shall be appointed by the President with the advice and consent of the Board of Trustees. Its purpose shall be to prevent or resolve misunderstandings, to clarify and adjust differences between physician and patient, and to assist in maintaining the high levels of professional deportment already established by the *Principles of Medical Ethics*. The committee shall consist of nine members, one from each Association District, appointed for terms of three years each so as to provide for appointment of three members annually. Members of this committee shall not simultaneously serve on any disciplinary or appeal body of the Association or its component societies. The committee shall have authority to compel a response either in writing or by personal appearance from any member of the Association, authority to initiate investigations on its own motion, and authority to file charges in the name of the committee

before the Judicial Council of the Association. Under no circumstances shall the Grievance Committee ever exercise a disciplinary function and its power and authority shall be limited to the receiving of complaints, conduct of investigations, hearings, mediation, arbitration, and where necessary, referral of matters to appropriate bodies for adjudication or discipline. The committee shall prescribe its rules for operation which shall not be in conflict with generally accepted guides promulgated by the American Medical Association.

Section 4. Committee on Publications. The Committee on Publications shall consist of six members. These shall consist of Editor, the two Associate Editors, and three others, the three latter being appointed by the Board of Trustees for terms of three years which are so arranged to provide for appointment of one such member annually. The chairman of the committee shall be designated by the Board. The committee shall implement instructions and policies of the Board of Trustees relating to the official Journal of the Association. Additionally, the committee shall study and recommend to the Board policy proposals relating to organization and production of the Journal, reporting annually its deliberations.

Chapter XI

RULES AND CONDUCT

The Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

Chapter XII

COMPONENT SOCIETIES

Section 1. Component Societies. All component societies now in affiliation with this Association or those that may hereafter be organized in this state, which have adopted principles of organization not in conflict with this Constitution and By-Laws shall, upon application to the Board of Trustees and approval by the House of Delegates, receive a charter from and become a component part of this Association. The Board of Trustees and House of Delegates, on recommendation by the Judicial Council, shall have authority to revoke the charter of any component society whose actions are in conflict with the letter and spirit of this Constitution and By-Laws.

Section 2. Number of Societies. Only one component medical society shall be chartered in any county but nothing in this section shall be construed as to prohibit unofficial organization of medical clubs or other county level groups of physicians whose purpose it is to further and advance scientific medicine and postgraduate medical education.

Section 3. Members of Societies. Each component society shall judge the qualifications of its own members, but as such societies are the only portals to this Association and to the American Medical Association, every reputable and legally registered physician who is qualified under Chapter I, Section 1, of these By-Laws shall be eligible for election to membership, provided scientific members shall also qualify under Chapter I, Section 3, subsection (d) of the By-Laws. Before a charter is issued to any component society, full and ample opportunity shall be given to every such physician in the county to become a member.

Section 4. Right of Appeal. Any physician who may feel aggrieved by the action of the society of his county or District in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Judicial Council, which, upon a majority vote, may permit him to petition for membership in an adjacent society.

Section 5. Evidence of Appeals. In hearing appeals, the Judicial Council may admit oral or written evidence, as in its judgment will best and most fairly present the facts, but in case of every appeal, efforts at a conciliation and compromise shall precede all such hearings.

Section 6. Area Jurisdiction. A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he resides.

Section 7. Professional Authority. Each component society shall have general direction of the affairs of the profession in its jurisdiction and shall constantly use its influence to the moral and professional betterment of its physicians, to the end that the membership shall embrace every qualified physician in its jurisdiction.

Section 8. Meetings. Frequent meetings shall be encouraged, and the most attractive programs arranged that are possible. The younger members shall especially be encouraged to do postgraduate work, and to give the society first benefit of such labors. Official positions and other preferments shall be unstintingly given to such members.

Section 9. Delegates. Each county shall be entitled to representation in the House of Delegates of this Association, one delegate for each fifty members or fraction thereof. Delegates shall be elected for terms of not less than two years and societies shall report such elections to the Executive Secretary of the Association in no event later than thirty days before the annual session.

Section 10. Duties of Component Society Secretaries. The secretary of each component medical society shall perform such duties as are usual and customary to his office. He shall maintain the official roll of membership for his society, shall collect dues and assessments, and shall make official reports as elsewhere prescribed in these By-Laws to the Association, transmitting dues in behalf of component society members. He shall conduct the official correspondence of his component medical society.

Chapter XIII

FISCAL YEAR

The fiscal year of the Association and its component county societies shall begin January 1 each year and end on December 31 following, but membership in the state Association shall not lapse until April 1 of that year.

Chapter XIV

AMENDMENTS

These By-Laws may be amended at any annual session by a majority vote of the delegates present at that session, after the amendment has laid upon the table for one day.

Chapter XV

REPEALING AUTHORITY

Upon adoption of these By-Laws, all previous By-Laws, motions of record, mandates, policies, rules and regulations in conflict therewith are hereby repealed, except that officers elected to serve in the Association and its component societies shall continue their incumbency until the completion of their previously prescribed terms and their successors elected under the current By-Laws.

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EDITORIALS

Quick Change in Saudi Arabia: From Slavery to Socialism

I

LAWRENCE WOULD HARDLY KNOW his old Arabia. To the Cadillac and air conditioning artifacts of oil prosperity is now being added the ultimate in trappings of westernism, a social security system complete with government medicine. And it's virtually a one man social revolution because Saudi Arabia is a nation of five million Islamic souls hardly inclined toward dependence on anybody. The social progressive is less than ubiquitous, too, what with slavery being abolished there only six months ago.

It all got started when the ailing, luxury-loving monarch, Ibn Saud, turned the country over to his brother and heir apparent, Crown Prince Faisal, who holds the portfolios of viceroy, prime minister, and foreign minister. The prince, a capable administrator, has embarked on a getting-the-country-moving-ahead program with public works, agriculture, and enough social reform to delight the last man on the left in the New Frontier.

The strangest aspect of all, however, is the totality of paternalism because Saudi Arabia has not one franchised elector nor a representative government. It is a completely prohibitionist nation, since Islam strictly forbids consumption of alcohol. In Jidda, Mecca, or any other Saudi city, for that matter, you go to jail if caught smoking. Foreigners aren't too welcome, unless, perhaps, they represent Aramco, the sole concessionaire for oil production which is owned by a complex of four U. S. oil companies. Laws are enacted only by royal decree and a census of the nation has never been made. Arabia is entirely debt-free because the last of its external and internal debts was paid off early in 1963. There is only one labor union in the country and it's made up of automobile mechanics, obviously more preoccupied with the royal rolling stock than the citizens' camels.

II

Though hardly subject to pressures with which he cannot easily cope, Faisal is out-frontiering any head of government in the world. He has been quoted as stating that his program has as its goal "making the state completely responsible for the livelihood of the old, the disabled, the orphan, and the woman who has no legal resource of family." Wilbur Cohen couldn't have said it better.

A Ministry of Health has been created to recruit physicians, nurses, pharmacists, and allied professional personnel from India. Naturally, the care will be free—for a tax consideration, of

course. There will also be benefits for the several categories of social security recipients and the sponsors make no bones about their plans for expanding the system of social reform.

The prince says that he will get the government into the fields of education, food and fiber production, utilities, and water resources. He has even called in the United Nations and foreign technicians of many nationalities, many of them Americans. In no small sense, Faisal has a full-blown, all-out, hands-down social welfare program going great guns in the one nation where it is logically least expected.

III

It is perfectly true that Saudi Arabia isn't everything a 20th century nation ought to be. Illiteracy is the rule and the several levels of social, economic, and political attainment would scarcely measure up to western minimums. The royal family, which is both numerous and fecund, has lived it up on Aramco royalties, often with less than enough regard for their nomadic subjects.

Religious taboos are many and unbelievable to Americans and Europeans. Most of the Saudis are resistant to change of any nature and the only liberal zealots are among externally educated youngsters and Faisal's cabinet. Which, when coupled with the enviable economic position of the oil-rich kingdom and its inherent conservatism, makes the whole story seem as though it were a second edition of *Arabian Nights*.

For the student interested in government, in medical socioeconomics, and the progress of private enterprise, Saudi Arabia is a situation worth keeping your eye on. Chances are Khrushchev is, too.—R.B.K.

It's That Time Again!

The surest sign of the summer constitutional quadrennium in Mississippi isn't the flowers, verdant grasses, or a good stalk on the cotton. It's the sound of the candidate with attendant tub thumping. Now, all of this is good and the electorate ought to take it seriously. No public office is unimportant and no political race, however local, should be casually decided.

Of the topmost importance are the contests for the state legislature because every seat in the house and senate is up for grabs. About one out of each 20 public and private bills enacted during the 1962 regular session related to matters of health and medical interest. Some of the more significant appropriations are in this area, while passage or defeat of certain measures, i.e., chiropractic licensure, can or would affect the health and well-being of every Mississippian.

Physicians need hardly be reminded that now is the time to talk to candidates with respect to their views and positions on matters of health and medical care. Where and when a candidate turns up whose information, interest, and personal position are indicative of his capability and willingness to regard the health of all citizens with the gravity and seriousness it deserves, he should be supported. There is simply no place in government for anybody of an opposite disposition.—R.B.K.

Realism in the Golden Years

A new eight point program on aging has been adopted by the American Medical Association. The chronic critics, cynics, and crying-towel crooners will have a tough time convincing anyone that it is negative or "against" anything. As a matter of fact, it is a positive, enlightened statement of common sense which is as practical as it is scientific. As a constructive beginning, AMA believes that there should be a reevaluation of everybody's attitude toward the aged. They should be recognized as individuals, not as a 17-million-member national problem. Senior citizens should be afforded every opportunity, the statement continues, to use their time and talents in worthwhile, productive activity which encourages self-reliance and imparts a sense of belonging.

The second point is full and complete implementation of the Kerr-Mills law. Most of the aged possess the means for financing necessary health care but for those few who do not, Kerr-Mills is the logical way, assuring quality care with local control. Third, AMA believes that the federal income tax laws ought to be overhauled so that those over 65 can deduct full costs of medical care purchased, including drugs which are now further subject to the 1 per cent limitation. Moreover, such revisions should include the carry-forward, carry-back deduction provisions on medical expenditures. After all, corporations may do this now to offset losses in one year against profits in another.

Fourth, the phenomenon of the century, the explosive growth of voluntary prepayment and health insurance plans, should be encouraged, especially as regards the aged. Retirement practices in business and industry should be recast, the

fifth point contends, so that valuable manpower and human resources aren't systematically wasted through compulsory retirement based solely on chronological age.

The sixth point calls for an increase in the quantity and quality of nursing home facilities. Although the number of nursing home beds has nearly doubled since 1954 to a present total of more than 338,000, much remains to be done. As a seventh step, AMA argues for expansion of community programs for the aged with medical organization in the forefront of the movement. Among such projects are community health services under medical supervision, recreational facilities adapted for the senior citizen, and job opportunities along with stimulation of interest in civic, church, and community affairs.

The final point is emphasis on the mental state of the aged within the context of mental illness as an urgent national medical problem. Although the aged occupy a disproportionately large number of beds in mental institutions, most of these people have no mental illness and should not be so institutionalized. Another key factor is regular medical care and counseling in the middle years as a preventive measure designed to promote sound mental states insofar as possible during the golden years.

Within this frame of reference, American medicine is conducting a vast and diversified program of service to seniors. And what's more, the public is becoming aware of its value.—R.B.K.

'Fedicare'

Here's a good example where a rose by any other name does not smell as sweet and MSMA's House of Delegates acted to do something about the name. At the recent 95th Annual Session, delegates pointed out that the administration's designation for King-Anderson-type legislation, "Medicare," was about as realistic as President Kennedy at a states rights rally.

From here on in, the House said unanimously, the odious proposal should be accurately labeled "Fedicare" which it patently is. And a further suggestion: roll it around on your tongue a couple of times, make a point to drop it in conversation, and gently substitute it for the present expression. If necessary, point out that "Medicare" is the official designation for the program of medical services rendered dependents of those in the uniformed services.

You'll be surprised how the word gets around! —R.B.K.

State Morbidity Reported Through June 14

The Mississippi State Board of Health reports the following occurrence of morbidity for 1963 through the 24th week of the year, ending June 14, 1963. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	371
Tuberculosis, O.F.	12
Encephalitis, infectious	8
Salmonella infections	9
Dysentery	
Bacillary	20
Amebic	7
Food Poisoning, NOS	21
Diarrhea of Newborn	1
Septicemia, Staph.	43
Meningococcus infection	
Meningitis	16
Meningococcemia	1
Meningitis, O.F.	28
Poliomyelitis	1
Tularemia	2
Mononucleosis, infectious	65
Hepatitis, infectious	360
Helminthic infections	
Hookworm	559
Ascariasis	171
Strongyloides	25
Sporotrichosis	1
Generalized Vaccinia	1
Rheumatic Fever	3
Histoplasmosis	2
Streptococcus infections	
Scarlet fever	187
Strep throat	1,557
Pertussis	60
Measles	628
Chickenpox	895
Tetanus	1
Mumps	538
Other complications of smallpox vaccination	3
Influenza	32,119
Gonorrhea	2,373
Syphilis	
Early	180
Late	83

Epidemiological—Laboratory Manual Available

The Division of Public Health Nursing and the Division of Public Health Laboratory, State Board of Health, have compiled and published a booklet entitled "Epidemiological Information and Laboratory Services for Public Health Nurses."

Part I of the publication concerns the epidemiological investigation of communicable diseases. Part II describes the correct manner of obtaining specimens for various diseases.

The booklet may be obtained from either the Division of Public Health Nursing or the Division of Public Health Laboratory, Mississippi State Board of Health.



The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

CRANE, EDMUND HILTON, JR., Gulfport. Born New Orleans, La., Aug. 13, 1930; M.D., Louisiana State University School of Medicine, New Orleans, 1956; interned Charity Hospital of Louisiana, New Orleans, one year; residency, Charity Hospital of Louisiana, New Orleans, three years; captain, U. S. Army, two years; elected Jan. 9, 1963, by Coast Counties Medical Society.

GIBSON, JAMES ADELL, Jackson. Born Mendenhall, Miss., Sept. 1, 1925; M.D., Harvard Medical School, Boston, Mass., 1954; interned Mississippi Baptist Hospital, Jackson, one year; residencies, VA Hospital, Hines, Ill., one year; VA Hospital, Downey, Ill., one year; Passavant Memorial Hospital, Chicago, Ill., five months; and the Institute for Juvenile Research, Chicago, Ill., one year; member, American Psychiatric Association; elected April 4, 1963, by Central Medical Society.

HERNANDEZ, RAUL JOSE, Meridian. Born Puerto Rico, Dec. 22, 1928; M.D., University of Seville, Spain, 1957; interned Birmingham Baptist Hospitals, Ala., one year; anesthesiology residency, University Hospital and Hillman Clinic, Birmingham, Ala., two years; member, Mississippi State Society Anesthesiology; clinical instructor in anesthesiology, University Hospital and Hillman Clinic, Birmingham, Ala., one year; elected April 2, 1963, by East Mississippi Medical Society.

HOUSTON, BOBBY JACK, Bay St. Louis. Born Union, Miss., Oct. 3, 1931; M.D., University of Mississippi School of Medicine, Jackson, 1961; interned Mississippi Baptist Hospital, Jackson, one year; U. S. Navy, four years; elected Jan. 9, 1963, by Coast Counties Medical Society.

Medicine-Pharmacy Group To Study Interrelationships

Membership of the new Joint Commission on Medicine and Pharmacy to explore interprofessional relationships of the two professions has been announced.

The eight-member commission was named by the American Medical Association and leaders of the pharmacy profession, with four members from each group. An organizational meeting will be held shortly.

Representing pharmacy will be Frank W. Moudry, past president of the National Association of Retail Druggists, of St. Paul, Minn.; Willard B. Simmons, executive secretary of the druggists' association, of Chicago; Robert Gillespie, president of the American Pharmaceutical Association, of St. Joseph, Mich.; and William S. Apple, secretary of the APA, of Washington, D. C.

Representing the American Medical Association will be Dr. Milford O. Rouse, vice speaker of the AMA's House of Delegates, of Dallas, Texas; Dr. George M. Fister, retiring president, of Ogden, Utah; Dr. Raymond M. McKeown, AMA secretary-treasurer, of Coos Bay, Ore.; and Dr. Leonard W. Larson, AMA immediate past president, of Bismarck, N. D.

Dr. Rouse will serve as chairman of the new Joint Commission.

Decision to name the Joint Commission was reached last month at a meeting at AMA headquarters in Chicago of representatives of the American Pharmaceutical Association and the National Association of Retail Druggists with the Board of Trustees and the Judicial Council of the AMA.

The meeting was arranged by the AMA Board of Trustees to give representatives of pharmacy an opportunity to discuss the recently published opinion of the Judicial Council regarding physician ownership of drug stores, drug-packaging houses, and pharmaceutical companies.

Book Reviews

Psychological Development in Health and Disease. By George L. Engle, M.D., Professor of Psychiatry and Associate Professor of Medicine, the University of Rochester School of Medicine and Dentistry. 435 pages. Philadelphia: W. B. Saunders Company, 1962. $7.50.

Medicine in general and the organicists in particular, have belatedly and reluctantly and sometimes grudgingly, recognized that psychological factors play a dynamic and often a controlling role in the production of organic as well as psychiatric disease, and an equally vital role in regaining and in maintaining a healthy homeostasis. The bringing together and the correlation and the harmonizing of these many pertinent psychological factors into one book as Engle has so effectively done, is comparatively new on the medical horizon.

This book has evolved out of the author's 18 years of lectures to the sophomore students at the Rochester School of Medicine on the subject of "Psychological Development in Health and Disease." Annually for 18 years the author and his staff have reviewed and revised these lectures and finally have compiled them into this instructive text. Untried paths of teaching medical psychology have been explored and are set forth in a most interesting style. Social, psychological, biological, behavioral, and psychoanalytical concepts, reconciled with solid medical practice, provide a rare combination of old and new knowledge so valuable that young physicians now coming upon the scene are infinitely better informed than their older contemporaries and predecessors, and are much better prepared to handle the baffling psychological ramifications that underlie so many of the common ailments. This book is being installed this year into the 1962-63 program of teaching at the University of Mississippi School of Medicine; it will be the basis of much theoretical discussion in the freshman and sophomore years and of much clinical application in the junior and senior years.

The instincts and the drives and the normal processes of homeostasis are first defined and discussed; then follows in extensive detail the psysiological changes at birth and the mental apparatus of the new born. Psychological introjection and projection are discussed and psychological rejection in infancy is shown often to be the basis of future psychic conflicts in adolescence and adulthood, leading to ambivalence, anxiety, depression, withdrawal, hostility, and even homosexuality.

It is set forth that certain deprivations of the infant and child often contribute to actual intellectual retardation and to the persistence of infantile primitive patterns of behavior extending into adulthood. With sphincter control beginning in the second year the mother may unconsciously teach her baby sphincter control difficulties she learned from her own overly strict parent, with resultant aberrant behavior by the child in the form either of incontinence or of retaining of urine and feces, for either pleasurable purposes or for the purpose of defying the mother.

Sexual differentiation, sexual identification, conflicts involved in the sexual drives, normal and abnormal Oepidus conflicts, the development of social conscience and of increasingly more mature moral and ethical feelings in boy and in girl, the effect of double standards often practiced by parents, and the essential homosexual composition of boy gangs, are all well delineated in most interesting detail.

It is stated that phobic parents often unconsciously force their children to do what the parents themselves fear to do; that the child may be unwittingly encouraged by a parent to act out the forbidden wishes and impulses of the parent, who derives vicarious pleasure therefrom and for which he or she at same time punishes the child, with the result that the child may develop feelings of unworthiness and inferiority. These processes all play a critical role in the extrabiological transmission and perpetuation of psychopathological traits from one generation to another. Truly, it can be said that the immaturities of the parents and of the grandparents are projected upon their offspring "even unto the fourth and fifth generations," paraphrasing the Bible.

The problems of early adulthood, middle and late adulthood (geriatrics), and of the family, are dealt with in chapters 18 to 21 in a most interesting and instructive manner.

Chapter 22 provides a simplified summary of the psychoanalytic theory of behavior, which can go far in clearing up some of the distorted impres-

sions that many of us older physicians still harbour about psychoanalysis.

The psychological ramifications involved in grief and mourning, danger, disaster, and deprivation, and many other major psychological stresses, are most thoroughly covered in 30 pages of detailed and enlightening discussion.

Psychiatric disease itself, its predisposition and pathogenesis, its various syndromes and nosological categories including sexual perversions, addictions, conversion, and other functional reactions, are well described and summarized. Pain as a symptom and as self-punishment, and flight-fight, withdrawal-conservation patterns all receive prominent mention. Finally, psychosomatic processes with their psychological determinants all receive thorough coverage.

The author stresses that there is no duality between so called "psychiatric" and "organic" diseases, that psychological stress is an important common denominator underlying both health and disease.

Regardless of one's specialty, every physician eager for a better understanding of the psychological etiologies and psychological pathologies underlying the illnesses of his patients, can ill afford not to avail himself of this new text for study and for ready reference.

ROLAND E. TOMS, M.D.

Diagnosis and Management of Pain Syndromes. By Bernard E. Finneson, M.D., Neurosurgeon, The Episcopal Hospital, Philadelphia. 261 pages. Philadelphia: W. B. Saunders Company, 1962. $8.50.

This book appears to have been written primarily for the general physician and not the neurosurgeon. The author has approached the problems of diagnosing and managing pain problems in a down-to-earth practical manner that obviously is tempered by his own experience. The book is divided into 12 chapters covering the following subjects: Pain and Its Effects, Principles of Treatment, Headache, Facial Pain, Neck Pain and Cervicobrachial Neuralgia, Low Back Pain and Sciatica, Visceral Pain of the Chest and Abdomen, Pain of Peripheral Vascular Disease, Reflex Dystrophies, Nerve Compression Syndromes, Painful Scars, Post-herpetic Neuralgia, Intractable Pain and Cancer.

Close study reveals a few errors in the neuroanatomical diagrams. Also, occasionally one may disagree with the author's assessment of the problems and his approach to management of them. Most often the points of disagreement would be ones of philosophy or minor points in management. An example of one of these differences would be that this reviewer does not believe that histamine desensitization has a place in the management of postconcussion headaches.

When evaluated from the overall view, these are relatively minor detractions and would be outweighed by the book's usefulness to the general physician attempting to evaluate and manage pain problems in the areas covered in the text. The brief descriptions of technique that fall solely within the discipline of neurosurgery are detailed enough to help anyone involved in the management of pain problems to know what can and what cannot be accomplished by neurosurgery in obtaining relief.

In summary, the author has succeeded in his goal of attempting to provide a practical and useful guide to the management of pain problems commonly encountered in practice. The text can be recommended as a handy, readable guide to every physician who is concerned with these problems.

JULIAN R. YOUMANS, M.D.



"Tell her that if she hasn't started hopping and her nose isn't twitching, she isn't drinking too much carrot juice."

ACS President Brings Commencement Address As 82 Graduates Receive Degrees from UMC

Eighty-two graduates received degrees during the June 2 commencement exercises of the University of Mississippi School of Medicine.

During the services held at First Baptist Church in Jackson, 64 graduates received doctor of medicine degrees, 14 received bachelor of science in nursing degrees, one received a doctor of philosophy degree in biochemistry and one a doctor of philosophy degree in anatomy, and two received master of science degrees in microbiology.

Dr. Loyal Davis of Chicago, president of the American College of Surgeons and chairman of the surgery department at Northwestern University, brought the commencement address.

"Much more is expected from a medical school and its faculty now than even 20 years ago," he told the graduates. "The tremendous increase of medical knowledge has forced teachers as well as practitioners of medicine to specialize," he said.

Dr. Davis, who has been editor of *Surgery, Gynecology, and Obstetrics* since 1938, told the commencement audience that technical advances have increased the effectiveness of patient care and research, but they have also increased the need for more elaborate equipment, more space, more personnel, larger budgets, and more hours spent in administration.

The commencement speaker concluded by saying, "You will find that this pursuit of a medical career requires a type of courage which is rarely, if ever, born in an individual as physical bravery is, but is acquired, not by easy triumphs, but by

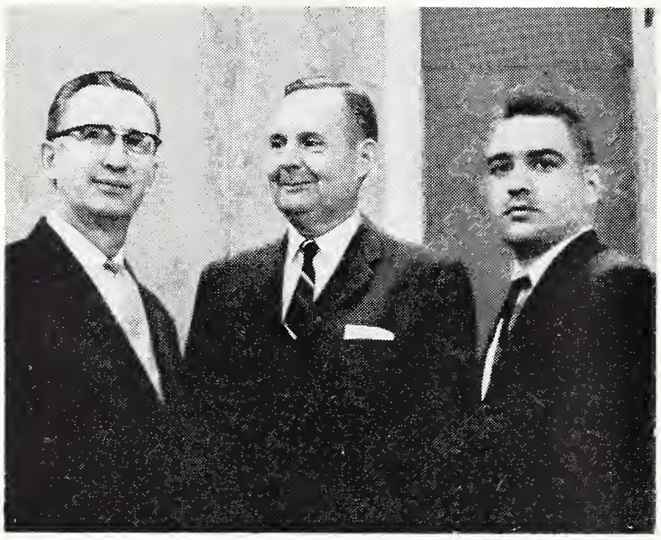


Shown are part of the 82 graduates who received degrees from the University of Mississippi School of Medicine in June 2 commencement exercises. Out of the 82, there were 64 who received medical degrees, 14 who received bachelor of science in nursing degrees, two who received doctor of philosophy degrees, and two who received master of science degrees.

shattering of pride of one's own strength, by despair born of fear little by little overcome."

Following the commencement address Chancellor John D. Williams conferred the degrees, and Dean Robert Q. Marston administered the Oath of Hippocrates.

The Leathers medal, given each commencement to the graduating medical student selected as outstanding by the dean and faculty, was presented to Dr. S. Kimble Love of Itta Bena. Rebecca Cox Samuelson of Biloxi was presented the Faculty Award, given each commencement to the graduating nursing student selected as outstanding by the dean and faculty.



Dr. W. E. Lotterhos, left, president of the University of Mississippi Medical Alumni, addressed the commencement breakfast on June 2 honoring 1963 graduates of the medical school. He is shown with University of Mississippi Chancellor J. D. Williams, center, and Dr. S. Kimble Love of Itta Bena. Dr. Love, who presided over the breakfast, was president of the class of 1963 and was awarded the Leathers Medal as the outstanding School of Medicine graduate during commencement exercises.

Candidates receiving medical degrees were Jerry Denton Ballard of Bay Springs; Thomasina Blissard of Jackson; Albert Edward Breland, Jr., of Laurel; Alvin Eugene Brent of Jackson; Larry Glen Broome of Bassfield; Nancy Ruth Watts Burrow of Pelahatchie; George Douglas Cain of McCall Creek; Richard Ney Canaan of Massapequa Park, N. Y.; John Andrew Carothers of Greenwood; James Ellis Clegg, Jr., of Eupora; Frank Bush Collins of Learned; Rex Wilson Collins of Houston; Donald Eugene Cook of Meridian; Thomas Edward Corley of Moss Point; Jesse Theo Davis, Jr., of Corinth; William Huddleston Dawkins of Louin; James Randolph Day of Laurel; Andrew Robert Dill of West Point.

Also, Mildred Jane Ellzey of Rose Hill; John Murray Estess of Hazlehurst; Leo Alexander Farmer of McComb; Edward Joseph Flynn of Mobile, Ala; Fred Douglas Frederick of Cleveland; James Rufus Galyean, III, of Corinth; William Edley Griffith of Jackson; Van Dyke Hagaman of Jackson; Richard Molpus Hill of Jackson; Marcus Leon Hogan, III, of Hattiesburg; Charles Hughes Hubbert of Grenada; Raymond Viggo Lassen, Jr., of Oxford; Adron Keith Lay of Webb; Albert Ray Lee, Jr., of Summit; Charles Leo Lee of Ludlow; Henry Leander Lewis, III, of Liberty; Wayne Anderson Lindsey of Booneville; Samuel Kimble Love of Itta Bena.

Also Charlie Anthony Marascalco of Grenada; Thomas Stanley Martin of Jackson; Robert Odell May of Meridian; Malcolm Deaton McAuley, Jr., of Byhalia; Louis Henry McCraw, Jr., of Jackson; James Norman McQueen of Jackson; James Henry Melvin of Jackson; Larry Morris Mitchell of Magee; Edwin Sims Mize of Jackson; Jerry Donald Moore of Carthage; Paul Leroy Odom of Tchula; Jay Carol Pennington of Columbia.

Also, Millard Wray Ramsey of Pontotoc; Jack Lawrence Ratliff of Jackson; William Thomas Robinson of Whitfield; Franklin Howard Russell of Yazoo City; Charles Edward Sampson, Jr., of Greenwood; David Winston Samuelson of Tchula; Don Louis Smith of Decatur; Gerald Arthur Smith of Sumner; Charles Oliver Stanback of Byhalia; H. Harvey Sykes, Jr., of Natchez; Joseph Finch Weldy of Laurel; Ray Lamar Wesson of Vicksburg; William Howard Westergard of Pocatello, Idaho; Paul Leon Whiteside of Jackson, Tenn.; Ralph Thomas Wicker of Hickory Flat; Cecil Theodore Williams, Jr., of Laurel.

Doctor of philosophy degrees went to Carroll Ball of Hattiesburg whose field is anatomy and Connie McCaa of West whose field is biochemistry. Master of science degrees were presented to Cynthia Murphy of Gulfport and Richard L. Soehner of Laurel who did their graduate work in microbiology.

Candidates for nursing degrees were Edna Cade of Lexington; Mrs. Martha Collins of Sunflower; Mrs. Lera Jean Crawford of Jackson; Betty Freeman of Hattiesburg; Ann Griffith of Meridian; Mrs. Faye Barnes Martin of Noxapater; Mrs. Chloe Pearce of Sumrall; Mary Hammond Potts of Jackson; Evelyn Raggio of Hazlehurst; Nell Ross of Olive Branch; Mrs. Rebecca Cox Samuelson of Biloxi; Rachel Taylor of Greenwood; Marjorie Truitt of Lexington; and Mrs. Donna Pool Wick of Malakoff, Texas.

Prior to the commencement exercises, graduates and their parents attended a breakfast at the Heidelberg Hotel and baccalaureate services at Calvary Baptist Church.

Dr. William E. Lotterhos of Jackson, president of the University of Mississippi Medical Alumni, brought the principal address for the breakfast.

Dr. Lotterhos told the graduates, "Each of you has earned, but none of you has purchased the privilege of earning, your professional attainment. What you have received in graduate and undergraduate scientific training is the gift of many minds, many hearts, and many treasuries. For example, the tuition fees of the medical student pay only one-sixteenth of his medical school's operating costs."

"You therefore have an enormous obligation to this institution and to the willing hands and dedicated minds which have made this day possible," Dr. Lotterhos said. "You must discharge this obligation and there are many currencies with which you must make payment," he continued.

"First," said Dr. Lotterhos, "You must render competent and compassionate service in conserving the health and well-being of your fellow man. Second, you must faithfully represent the University of Mississippi. Third you must recognize that the strength and capability of our University ultimately can be no greater than we will it to be."

The alumni president pointed out that there are convenient mechanisms through which this interest in the University could be expressed including the alumni association, professional societies, and community efforts.

He challenged the new physicians to begin by earmarking a small portion of their incomes for the alumni association, to actively participate in their professional groups, and to use their influence as community leaders to mobilize the support of business and industry in behalf of professional education.

Concluding, Dr. Lotterhos said, "I am but one small voice in the roar of acclamation which is yours today but with your teachers, your families, and all Mississippians, I wish you Godspeed and pledge that all who have gone before will give their best to brighten the lamp of learning which has guided you to this moment of achievement."



"Fred, drop by the driving instructor's ward and ask him if I failed just because of one mistake."

PERSONALS

JOHN OLIN BINNS has opened his practice of medicine in Waynesboro. A native of Atlanta, Ga., Dr. Binns was graduated from the Tulane University School of Medicine in 1960 with the highest scholastic average of his class. Dr. Binns interned at Duke University Hospital in Durham, N. C.

WILLIAM S. COOK has announced his association with the Simmons Ob-Gyn Clinic in Jackson. Other members of the group are WALTER H. SIMMONS, ROSS F. BASS, and JOHN T. KITCHINGS. A 1959 graduate of the University of Mississippi School of Medicine, Dr. Cook interned at John Gaston Hospital in Memphis and took his residency at the University of Tennessee School of Medicine.

J. V. FERGUSON has closed his New Albany practice to begin a residency in radiology at the University of Mississippi School of Medicine.

JAMES H. GADDY of Gulfport and JOHN T. KITCHINGS of Jackson have been certified by the American Board of Obstetrics and Gynecology.

DR. and MRS. ISAAC CECIL KNOX celebrated the fiftieth anniversary of their wedding on June 11. Dr. Knox founded the Vicksburg Hospital, and one of his sons, Dr. I. C. Knox, Jr., is now head of the Department of Obstetrics and Gynecology of the Vicksburg Hospital and vice president of the hospital's Board of Directors.

RONALD R. LUBRITZ, who recently completed specialty training in dermatology at Charity Hospital in New Orleans, has opened his practice in Hattiesburg. Dr. Lubritz is a graduate of the

Louisiana State School of Medicine. He interned at Touro Hospital in New Orleans.

ROBERT Q. MARSTON, dean of the University of Mississippi School of Medicine, was the commencement speaker at the University of Missouri Medical School in Columbia June 3.

DANIEL TRIGG of Greenwood Leflore Hospital has been named a diplomate of the American Board of Pathology.

Total Care Program Offered To Young Cancer Patients

St. Jude Hospital, a Memphis institution affiliated with the University of Tennessee, is now accepting children with cancer under a total care program.

Dedicated to the study and care of children with serious diseases and to basic research in the biological sciences, St. Jude Hospital is now concentrating on childhood cancer.

The research institution will accept patients under the age of 16 who have acute leukemia or other forms of cancer. These children will receive total care including conventional forms of treatment in addition to experimental drugs and procedures that have been developed to the point of clinical application.

Under its current program, the hospital covers hospitalization, medical care, and drug costs. However, it cannot pay for patient transportation. The institution accepts no private patients and its fulltime research clinicians do not practice privately. Patients are accepted without regard to race, religion, or place of residence. Preference, however, is given to children whose disease is untreated. Each patient must be referred by a licensed physician.

St. Jude Hospital was constructed and equipped by Americans of all religions, races, and socioeconomic groups under the leadership of Danny Thomas, entertainer, and Edward Barry, philanthropist. It is maintained by funds contributed to the American Lebanese Syrian Associated Charities and is owned and managed by a national Board of Governors representing the contributors.

Further information regarding the hospital's referral policies may be obtained from Dr. Donald Pinkel, Medical Director, 332 N. Lauderdale, Memphis 3, Tenn.

AMA Announces Universal Emergency Symbol

The American Medical Association has announced a new universal symbol which will tell anyone rendering emergency care to a person who is unconscious or otherwise unable to communicate that its wearer has a special physical condition requiring special attention.

The symbol may be displayed on a wristlet, an anklet, a medallion around the neck, or elsewhere. The symbol will be a sign that there are vital medical facts on a personal health information card in the bearer's purse or wallet or on an alerting device.



Dr. Carl Potthoff of Omaha, Neb., served as chairman of the AMA's Committee on Emergency Medical Identification during its two years of conferences and studies.

The symbol is a hexagon-shaped emblem containing a six-pointed figure, or sign of life. Superimposed on the figure is the staff of Aesculapius, the insignia of the medical profession.

The symbol will be used by many individuals. Diabetic coma, for instance, sometimes makes its victims appear intoxicated, and treatment may be dangerously delayed. The symbol also could indicate allergies to antibiotics, such as penicillin, and many other physical problems.

Mississippi To Participate In Crash Injury Study

Beginning July 1, physicians in selected areas of Mississippi will be asked to participate in the automotive crash injury studies of the Cornell Aeronautical Laboratory, Inc.

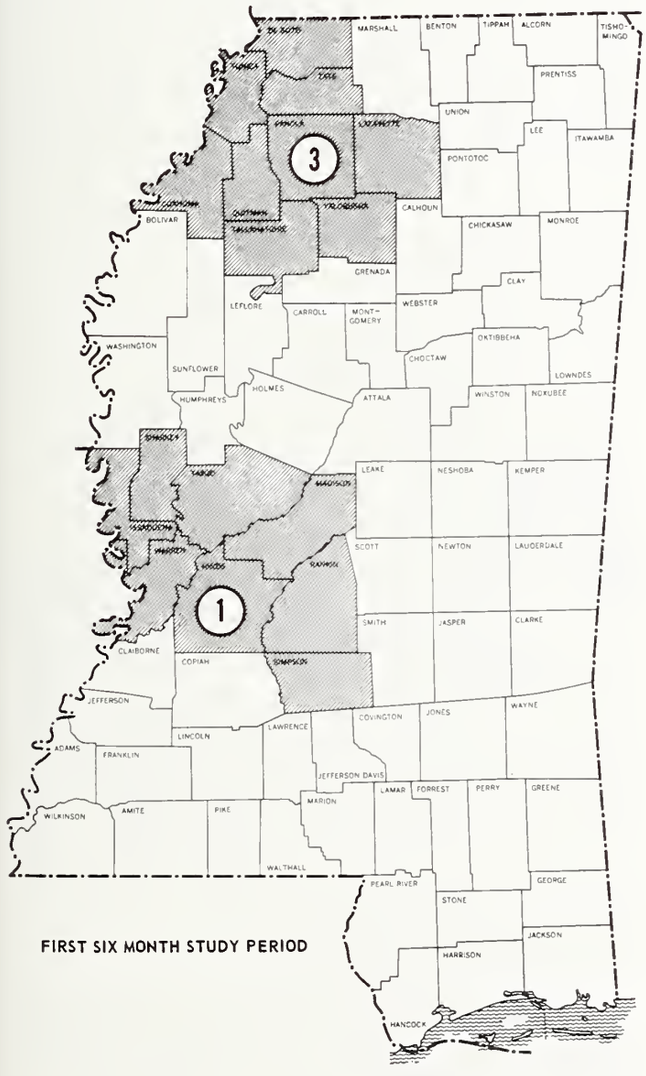
Since its inception, the purpose of this research has been to obtain reliable data on the specific causes of injury to occupants of cars involved in accidents, rather than on the causes of the accidents.

Information from the interstate ACIR program served as a basis for the designing of passenger protection devices such as seat belts, improved door latches, energy-absorbing steering wheels, padding with which automobile manufacturers

began equipping their cars in about 1955. Now, one of the purposes of the program is to collect data for use in evaluating the effectiveness of those recently adopted safety devices, as well as in showing the need for additional protection.

The Cornell studies employ the epidemiological approach, and Mississippi is the 25th state in which the state medical association, the state department of health, the state hospital association, and the state highway patrol have agreed to cooperate. The other states are Indiana, North Carolina, Maryland, Connecticut, Virginia, Minnesota, Arizona, Vermont, Texas, California, Pennsylvania, Georgia, New York, Michigan, Colorado, Oregon, Ohio, Illinois, New Mexico, South Carolina, Wisconsin, Iowa, North Dakota, and Kentucky.

During the two year study in Mississippi, doctors will be asked to provide medical information only during the six-month period in which their county is represented in the sampling area. On an average there will be 20 counties included in any one period.



FIRST SIX MONTH STUDY PERIOD

Counties included during the first sampling are Hinds, Issaquena, Madison, Rankin, Sharkey, Simpson, Warren, Yazoo, Coahoma, De Soto, Lafayette, Panola, Quitman, Tallahatchie, Tate, Tunica, and Yalobusha.

When one or more occupants in a passenger car of one of the last four year models is injured, the state highway patrol officer assigned to investigate the accident will have two extra tasks to perform. He will be asked to take photographs of the damaged portions of the car and provide certain information with respect to the association of injury with car structure. He will also be asked to deliver the Cornell medical report form, one on each injured person, to the hospital emergency room or doctor's office where the injured are taken or to the county coroner for passengers killed in the crash.

When the physician has completed the forms, they will be forwarded by the hospital to the State Board of Health. The form for physicians is brief, and since it is anticipated that reports will be sought on no more than four injured individuals per day in the average 20 county study area, the likelihood is small that any particular doctor will need to report on more than four or five occasions.

Dr. N. C. Knight, director, Accident Prevention Program of the Mississippi State Board of Health, will coordinate the medical aspects of the program. His office will receive the reports from the State Highway Patrol and from physicians and will forward them to Cornell.

University Surgeons Transplant Human Lung

Surgeons at the University of Mississippi School of Medicine performed what is believed to be the first human lung transplantation on June 11. At JOURNAL MSMA press time, the patient, a 58-year-old male, was doing well, a university spokesman said.

In a three-hour procedure, the surgical team replaced the patient's cancerous left lung with a healthy lung from an unrelated donor. Prior to the June 11 operation, the university surgeons had completed detailed studies on the use of lung homotransplants in more than 500 experimental animals over a period of seven years.

The lung transplantation studies at the University were largely supported by funds from the Office of the Surgeon General, Department of the Army.

Dr. Culpepper Addresses Pharmaceutical Meet

Dr. J. P. Culpepper, MSMA delegate to the American Medical Association, was one of three featured speakers before the June 10-12 meeting of the Mississippi State Pharmaceutical Association.

Then serving as AMA vice president and member of the Board of Trustees, Dr. Culpepper spoke on "Some Areas of Mutual Interest."

Other guest speakers for the three-day meet were Dr. George Archambault and Fred C. Hecker. Dr. Archambault, who is immediate past president of the American Pharmaceutical Association, serves the U. S. Public Health Service as Pharmacy Liaison Officer to the Surgeon General of the United States. Mr. Hecker is associated with the professional and trade relations department of Eli Lilly and Company of Indianapolis, Indiana.

Dr. Archambault spoke on "Advancing the Status of Pharmacy—the Profession" while Mr. Hecker's subject was "Professional Services—the Key to Success."

This was the 81st annual convention of the Mississippi State Pharmaceutical Association.

Haven Hall Services Open On Hourly-Weekly Basis

Haven Hall, a home for the custodial care of handicapped children and young adults, is now making its services available on an hourly, daily, or weekly basis, according to Mrs. George Gillespie, president of the Board of Trustees.

Located in Jackson on Sunset Drive, Haven Hall was established in 1960 as a chartered nonprofit corporation following a study of the need of such a service by the Community Services Council of United Givers. The home is licensed by the State Board of Health and has a capacity of 12 residents.

A staff experienced in the care of the handicapped is maintained by the home and includes a registered nurse. Support for Haven Hall comes from United Givers of Jackson, private donations, and the $100 per month fee paid for boarders.

All applications for admittance are reviewed by a committee composed of board members to determine if the applicant can be cared for with the home's current facilities. Haven Hall has cared for boys and girls with limited mobility and mentality as well as controlled seizures. Children who are trainable can be sent from Haven Hall to Sanders School, a school for the handicapped.

Further information and application forms may be secured from Mrs. Prentiss Cooper, Route 3, Box 245, Jackson, Miss.

Dispute over Hallucinogenic Compounds Reaches Climax

The ongoing controversy over consciousness-expanding drugs (such as LSD, psilocybin, and mescaline) reached a climax recently with the dismissal of two Harvard University faculty members.

The Harvard Crimson of May 28 announced the termination of the appointment of Dr. Richard Alpert as assistant professor of clinical psychology and of education for violating a university agreement by giving consciousness-expanding drugs to an undergraduate. The announcement came from Harvard President N. R. Pusey.

President Pusey also said that Dr. Timothy E. Leary, lecturer on clinical psychology and a close associate of Professor Alpert in experiments with psilocybin, had been relieved of his teaching du-



"I do solemnly swear that I know nothing about my ailment and will not try to put my two-cent's worth into the diagnosis."

ties and had his salary terminated on April 30 for leaving Cambridge and his classes without permission.

In his statement to the *Crimson,* President Pusey said Dr. Alpert had violated an agreement with the university not to give consciousness-expanding drugs such as psilocybin and mescaline to undergraduates. The statement also implied that Dr. Alpert had lied to an officer of the university last November when he "assured" the administration that "he had not given drugs to any undergraduate."

President Pusey emphasized that despite the strong action of the university, it had no objection to "responsible" research with consciousness-expanding drugs. The university has had serious doubts about the nature of the drug research conducted by Dr. Alpert and Dr. Leary for some time, but took the May action on the basis of definite evidence received in the prior few weeks, the *Crimson* said.

Last fall a committee of the Laboratory of Social Relations failed to come to an agreement with Dr. Alpert on controls for the drug research and the Laboratory and Dr. Alpert agreed the research could not continue at Harvard. The May decision was not related to the methods of Dr. Alpert's investigation, but solely to his unauthorized use of at least one undergraduate as a research subject.

Dr. Robert F. Bales, director of the Laboratory, said that Dr. Alpert was unwilling to relinquish drugs he intended for his personal use, claiming he had a citizen's right to possess them. In view of this the Laboratory felt it was impossible to establish "proper control of the drugs," he said.

Director Bales said Dr. Alpert's colleagues were "subjected to unpleasant pressures" while the investigations were being discussed. Many members of the department felt Dr. Alpert was not conducting his work with a scientific approach, he said.

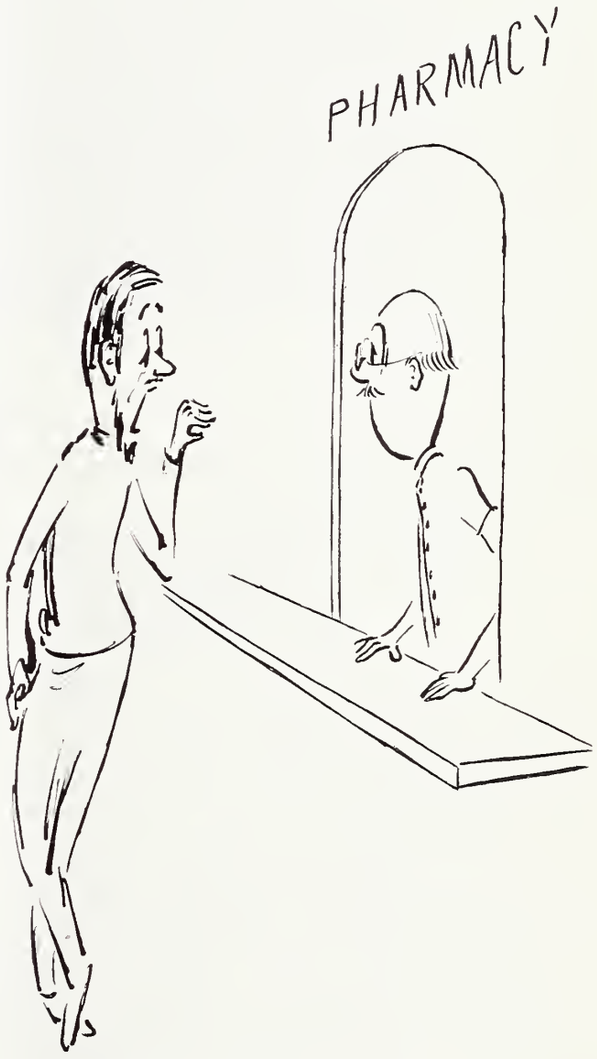
"They (Drs. Alpert and Leary) wished to proceed in a promotional way—not a research way," Director Bales said, adding that Dr. Alpert was not willing to take "sufficient care in the selection and protection of his subjects." In Director Bales' opinion, Dr. Alpert failed to cope with the public relations problem and the "medical risks" involved.

Chairman David C. McClelland, of the Social Relations department, said it appeared that the more Dr. Leary and Dr. Alpert took the drugs "the less they were interested in science."

In his statement Dr. Alpert said, "Now that Dr. Leary and I are no longer affiliated with Harvard, we along with our colleagues plan to devote our total efforts to IFIF (the International Foundation for Internal Freedom, a private organization to administer and investigate consciousness-expanding drugs). Our objective is to pave the way through a research and educational program to be able to provide any serious individual with an opportunity to expand his consciousness with psychedelic materials if he desires."

"At the present time," continued Dr. Alpert, "the Food and Drug Administration has not licensed any research with psychedelics except that sponsored by the government. Until such time as this very restrictive picture is changed, we will continue an active research and training program in Mexico."

Meanwhile, two Los Angeles physicians writing in the May issue of the *AMA Archives of General Psychiatry* recommended that LSD-25, one of the hallucinogenic compounds, be restricted to investigators in institutions and hospitals.



"I'd like some habit forming drug."

Drs. Sidney Cohen and Keith S. Ditman said that "until the indications, techniques, and precautions are better understood, LSD therapy should be restricted to investigators in institutions and hospitals where the patient's protection is greater and appropriate countermeasures are available in case of adverse reactions."

Although the actual incidence of serious complications following LSD administration is not known, they said, they believed that complications are "infrequent." "In the majority of the cases who developed complications the drug had been obtained from improper sources," they said.

As they reported originally in the *AMA Journal* last year, the researchers reiterated that "a black market exists in this country, and tablets, ampules, and sugar cubes saturated with LSD have become available in the large cities and on some university campuses," they wrote.

"Easy access to the drug will result in its accidental or deliberate administration to people without their knowledge, and this can be a devastating event," they said. The authors described several cases of prolonged psychotic reactions, severe depressive and anxiety states, and intensified sociopathic behavior following use of the drug.

At the same time, the researchers emphasized the importance of continued study of LSD and allied drugs so that their advantages and limitations are eventually understood. "It is our impression that they are unique tools in the study of altered states of awareness, perception, and ideation," they said.

LSD-25, the short name for lysergic acid diethylamide, is a derivative of the fungus, ergot. It is distributed by the manufacturer only for scientific investigation.

New Orleans Assembly Set For March 2-5

The 27th annual meeting of the New Orleans Graduate Medical Assembly will be held March 2-5, 1964, headquarters at the Roosevelt Hotel.

The following officers and members of the Executive Committee have been elected for this year: Dr. W. E. Kittredge, president; Dr. Philip H. Jones, president-elect; Dr. George M. Haik, first vice-president; Dr. Mannie D. Paine, Jr., second vice-president; Dr. L. Sidney Charbonnet, Jr., third vice-president; Dr. Friedrichs H. Harris, secretary; Dr. Samuel R. Staggers, treasurer; Dr. Daniel C. Riordan, director of program; Dr. Isadore Dyer, assistant director of program; Dr. W. C. Rivenbark, assistant director of program.

Members of the Executive Committee include Drs. Walter F. Becker, Frederick F. Boyce, Ralph M. Hartwell (retiring president), Louis A. Monte, and Simon V. Ward.

Sixteen Physicians Named To State AMA-ERF Group

Sixteen physicians have been named to represent their component societies on the MSMA Committee on American Medical Association Education and Research Foundation.

Dr. John G. Archer of Greenville, association president, made the appointments and named Dr. Raymond F. Grenfell of Jackson as committee chairman.

In addition to Dr. Grenfell, committee members are Drs. Charles E. Catchings, Jr., Woodville, William N. Jenkins, Port Gibson; Robert R. McGee, Clarksdale; Wesley W. Lake, Sr., Gulfport; Howard A. Nelson, Greenwood; Henry M. Wadsworth, Hernando; James A. Lauderdale, Jr., Meridian; Robert H. Barnes, Jr., Natchez; Eugene M. Murphey, Tupelo; N. C. House, Batesville; Paul Brumby, Lexington; Dennis E. Magee, Picayune; Joseph G. McKinnon, Hattiesburg; James E. Safley, Brookhaven, William K. Purks, Vicksburg.

Meetings of the committee will be called by Dr. Grenfell who is the coordinator between the Mississippi group and the AMA-ERF headquarters in Chicago.

DEATHS

BROYLES, NASH WOODS, Jackson. M.D., Tulane University School of Medicine, New Orleans, La., 1898; emeritus member of MSMA and member of the Fifty Year Club; died May 17, 1963, aged 90.

HOLLOWELL, FREDERICK DIXON, JR., Jackson. M.D., University of Virginia School of Medicine, Charlottesville, 1932; interned New York Polyclinic Medical School and Hospital, New York City, one year; EENT residency, New York Polyclinic Medical School and Hospital, New York City, two years; certified by the American Board of Otolaryngology, 1939; past president, Mississippi Eye, Ear, Nose, and Throat Association; former vice president of the Louisiana-Mississippi O&O Society; Fellow, American Academy of Ophthalmology and Otolaryngology; commander, U. S. Navy; died May 28, 1963, aged 55.



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Each No. 2 capsule contains 15 mg. of Dexedrine® (brand of dextro amphetamine sulfate) and 1½ gr. of amobarbital, derivative of barbituric acid [Warning, may be habit forming]. Each No. 1 capsule contains 10 mg. of Dexedrine (brand of dextro amphetamine sulfate) and 1 gr. of amobarbital [Warning, may be habit forming].

The active ingredients of the 'Spansule' capsule are so prepared that a therapeutic dose is released promptly and the remaining medication, released gradually and without interruption, sustains the effect for 10 to 12 hours.

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SIDE EFFECTS: Insomnia, excitability and increased motor activity are infrequent and ordinarily mild.

CAUTIONS: Use with caution in patients hypersensitive to sympathomimetics or barbiturates and in coronary or cardiovascular disease or severe hypertension. Excessive use of the amphetamines by unstable individuals may result in a psychological dependence; in these rare instances withdrawal of medication is recommended. It is generally recognized that in pregnant patients all medications should be used cautiously, especially in the first trimester.

SUPPLIED: Bottles of 50 capsules.

Smith Kline & French Laboratories SK&F *Prescribing information Jan. 1963*

Radioisotopes in Diagnosis Subject of Oak Ridge Courses

Schedules in 1963-64 training courses in the diagnostic application of radioactive isotopes have been announced by the Oak Ridge Institute of Nuclear Studies (ORINS), Oak Ridge, Tenn.

The courses, designed to provide physicians with basic training and clinical experience as required by the Atomic Energy Commission for licensure, are administered for the Commission by the ORINS Special Training Division.

The three-week courses are presented in one-week sequences: basic, preclinical, and clinical. The sequences may be taken either consecutively or in single weeks spaced at the convenience of the applicants, for the benefit of physicians unable to leave their practices for three successive weeks.

Applicants for the courses must be United States citizens and must possess a current license to practice medicine within the United States.

The schedule for course presentations is as follows:

Basic Week—*In vitro* Counting: July 8-12, Aug. 5-9, Sept. 9-13, Jan. 6-10, March 2-6.

Preclinical Week—External Counting: Aug. 12-16, Sept. 16-20, Jan. 12-17, March 9-13.

Clinical Week—Diagnostic Procedures on Patients: Sept. 23-27, Jan. 20-24, March 16-20.

Further information on course content, fee schedules, and application blanks may be obtained by writing the Special Training Division, Oak Ridge Institute of Nuclear Studies, P. O. Box 117, Oak Ridge, Tenn.

Chest Physicians Establish Alfred A. Richman Fellowship

The Alfred A. Richman Fellowship for Chest Disease has been established by the Council on International Affairs of the American College of Chest Physicians.

This fellowship, through a grant from Dr. Richman of New York City and his associates, will make it possible for deserving physicians to pursue postgraduate study in an approved institution of their choice for a period of one year.

Recent reports suggest...insulin and sulfonylureas may accelerate lipogenesis, fat accumulation, weight gain; thus appear to aggravate obesity in diabetics[1-5] *...serum "insulin" levels are often elevated in obese diabetics*[2,3,6] *...DBI (phenformin HCl) reduces high blood sugars, lowers elevated "insulin" levels, tends to reduce body weight toward normal.*[1,3,7-9]

most effective in the obese diabetic

DBI® tablets 25 mg.

DBI-TD® timed-disintegration capsules 50 mg.

BRAND OF PHENFORMIN HCl



The fellowship provides for a grant of $100 per month for a period of 12 months.

The selection of candidates will be under the supervision of the Council on International Affairs of the college. For complete information, applicants are requested to write to the council c/o American College of Chest Physicians, 112 East Chestnut Street, Chicago 11, Ill.

Dr. Richman has been active for a number of years in furthering postgraduate medical education in chest disease, while serving as the chairman of the Committee on Resident Fellowship of the college.

Infections To Be Subject Of Minnesota Meet

The University of Minnesota in cooperation with the U. S. Public Health Service has scheduled a National Conference on Institutionally Acquired Infections to be held at the university Sept. 4-6.

Sponsoring departments are the College of Medical Sciences and the Mayo Foundation of the university and the Communicable Disease Center and the Division of Hospital and Medical Facilities of PHS.

A preliminary program has not yet been released, but the areas of epidemiology, environmental health, and laboratory services are expected to be covered.

Further information may be secured from Dr. Gaylord W. Anderson, Mayo Professor and Director, School of Public Health, University of Minnesota, Minneapolis 14, Minn.

AMA Names New General Counsel

Robert B. Throckmorton of Des Moines, Iowa, has been named general counsel of the American Medical Association, effective July 1.

Dr. F. J. L. Blasingame, executive vice president of the AMA, said Mr. Throckmorton will succeed C. Joseph Stetler, who resigned to become executive vice president and general counsel of the Pharmaceutical Manufacturers Association in Washington, D. C. on July 1.



DBI and DBI-TD (phenformin HCl),

administered to ketoacidosis-resistant diabetics requiring hypoglycemic therapy: A. act to reduce high blood sugar without increasing fat synthesis or weight gain as insulin and sulfonylureas tend to do. B. do not increase already elevated endogenous insulin levels; may, indeed, act to restore more normal insulin levels. C. favor reduction of weight towards normal.

Insulin is still the essential hypoglycemic agent for the ketoacidosis-prone diabetic. However, in the ketoacidosis-resistant obese diabetic phenformin appears to be the hypoglycemic of choice to help avoid weight gain or reduce adiposity, a factor tending to make control more difficult and to increase the likelihood of complications.

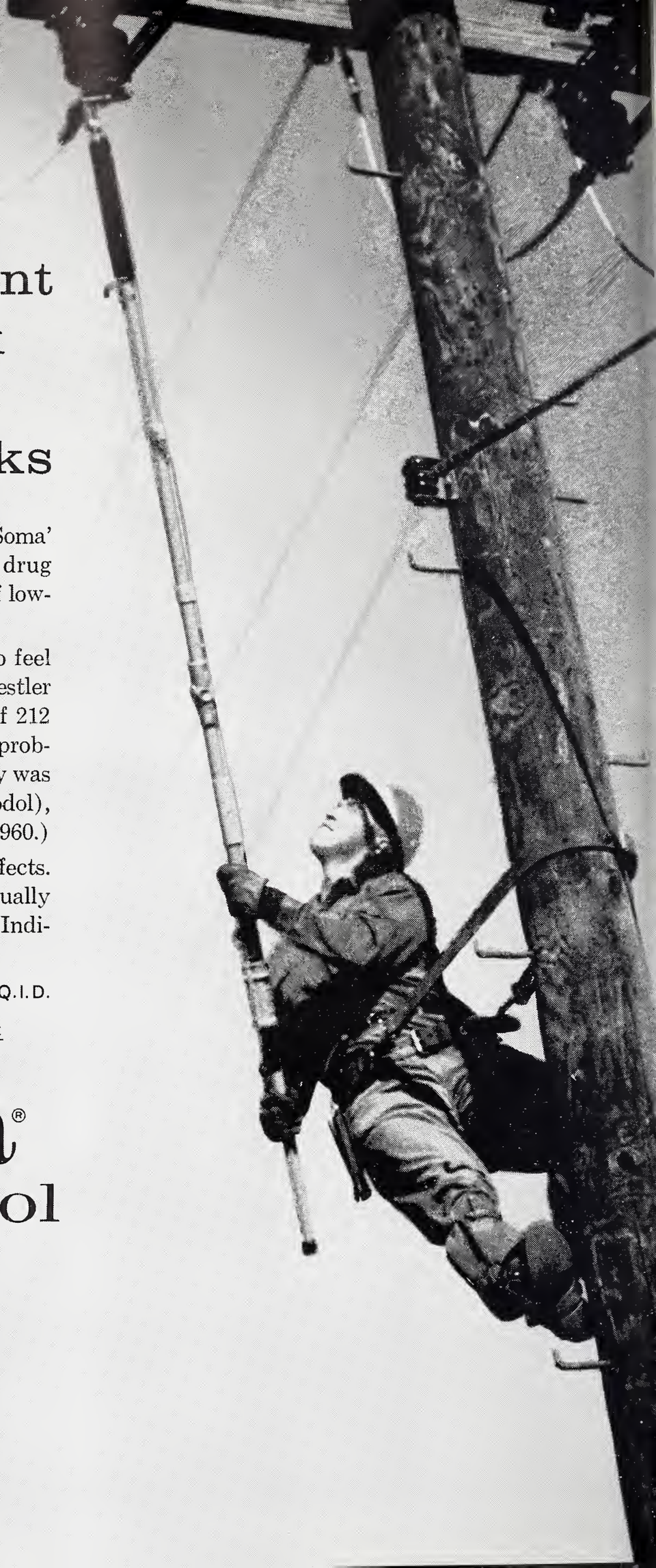
Summary: Indicated in stable adult diabetes, sulfonylurea failures and unstable diabetes. Gastrointestinal side effects occurring more often at higher dosage levels abate promptly upon dosage reduction or temporary withdrawal. Occasionally an insulin-dependent patient will show "starvation" ketosis (acetonuria without hyperglycemia) which must be differentiated from "insulin-lack" ketosis, and treated accordingly. Use with caution in severe liver disease. Not recommended without insulin in acute complications (acidosis, coma, infections, gangrene, surgery). Consult product brochure for full information.

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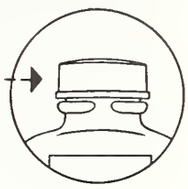
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MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Clinical Meeting, Dec. 1-4, 1963, Portland, Ore. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn, Chicago 10, Ill.

American College of Surgeons, Oct. 28-Nov. 1, 1963, San Francisco. Samuel P. Harbison, Secretary, 40 East Erie, Chicago 11, Ill.

American Academy of General Practice, April 11-16, 1964, Atlantic City, N. J. Mr. Max F. Cahal, Volker Blvd at Brookside, Kansas City 12, Mo.

Southern Medical Association, Nov. 18-21, 1963, New Orleans, La. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham 5, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 11-14, 1964, Jackson. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Mississippi Academy of General Practice, Sept. 25-26, 1963, Jackson. Miss Louise Lacey, Executive Secretary, P.O. Box 1435, Jackson, Miss.

Amite-Wilkinson Counties Medical Society, First Tuesday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday Monthly, 6:30 p.m., Robert E. Lee Hotel, Jackson. Jim G. Hendrick, 800 Carlisle St., Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday March and First Wednesday November, 2:00 p.m., Clarksdale. Whitman B. Johnson, Jr., 422 McWilliams Building, Clarksdale, Secretary.

Coast Counties Medical Society, Second Wednesday, January, First Wednesday, March, May, July, September, November. Charles N. Floyd, 1619-23rd Ave., Gulfport, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. Robert M. Graham, 612 Dixie Towers, Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March and September. Robert B. Townes, Jr., 1196 Mound St., Grenada, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. Thomas W. Wesson, 420 Magazine, Tupelo, Secretary.

North Mississippi Medical Society, First Thursday April and October, Oxford. Marcus E. Morrison, 512 Van Buren Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucien Olen Crosby Memorial Hospital, Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. James C. Bass, Jr., 424-13th Ave., Laurel, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Tom H. Mitchell, The Street Clinic, Vicksburg, Secretary.

Allergy Foundation Announces Fellowships

The Allergy Foundation of America has announced the availability of four post-doctoral fellowships in research and clinical allergy.

These fellowships, which are for two years, were established to prepare a group of promising young physicians for research, hospital and university careers in allergy.

Recipients will receive intensive and highly specialized advanced training in research and clinical allergy, thus equipping them to become leaders in this rapidly expanding field.

Candidates must be graduates of approved medical schools and must have completed at least two years of hospital internship training. They are expected to divide their time between research work and clinical training in allergy as arranged with the preceptor.

At present four fellowships are available under the following preceptors:

Rudolph L. Baer, M.D.
Professor and Chairman
Department of Dermatology
New York University Post-Graduate Medical School
550 First Avenue, New York 16, N. Y.

Dan H. Campbell, Ph.D.
Department of Immunology and Chemistry
California Institute of Technology
Pasadena, California

Frank J. Dixon, M.D.
Head, Division on Experimental Pathology
Scripps Clinic and Research Foundation
Prospect Street
La Jolla, California

Francis C. Lowell, M.D.
Chief of Allergy
Massachusetts General Hospital
Boston 14, Massachusetts

The stipend for the first year is $5,400; for the second year, $6,300; laboratory and travel expenses for the two-year period equal $800.

The awards are made by the Board of Directors of the Foundation on the recommendations of its Scientific and Educational Council.

Requests for applications should be sent directly to the Secretary of the Scientific and Educational Council, Allergy Foundation of America, 801 Second Avenue, New York 17, N. Y. At the same time each applicant should indicate which of the fellowships is his first choice.



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Articles for Publication

Manuscripts should be typewritten, double spaced on one side of the paper. Tables, charts, and tabulations should be submitted on separate sheets but their position in the text should be indicated. Authors are encouraged to limit bibliographies to 10 references, written in conformation to style utilized in scientific publications of the American Medical Association. Articles are accepted for publication on the condition that they have not been previously published and are contributed solely to this JOURNAL.

A thesis summary of 75 to 100 words must accompany each manuscript separately from the text. Figures and drawings are acceptable when prepared with black ink on white paper. Photographs for illustrations should be unmounted, untrimmed, glossy prints and all such material must be identified. No charges are made to authors for illustration engravings not exceeding four column inches per printed page.

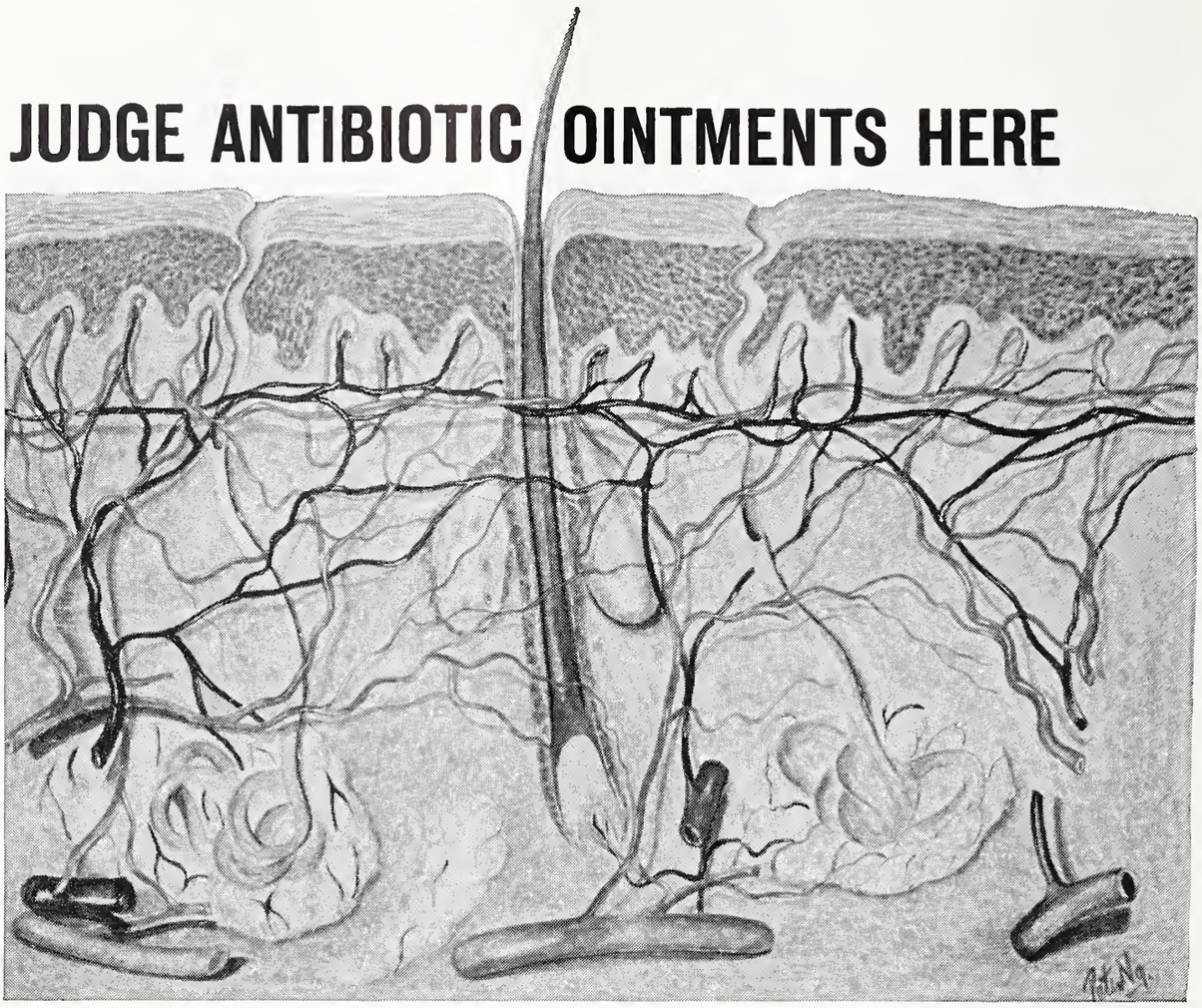
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Volume IV
Number 8
August 1963



JOURNAL of the Mississippi STATE MEDICAL ASSOCIATION

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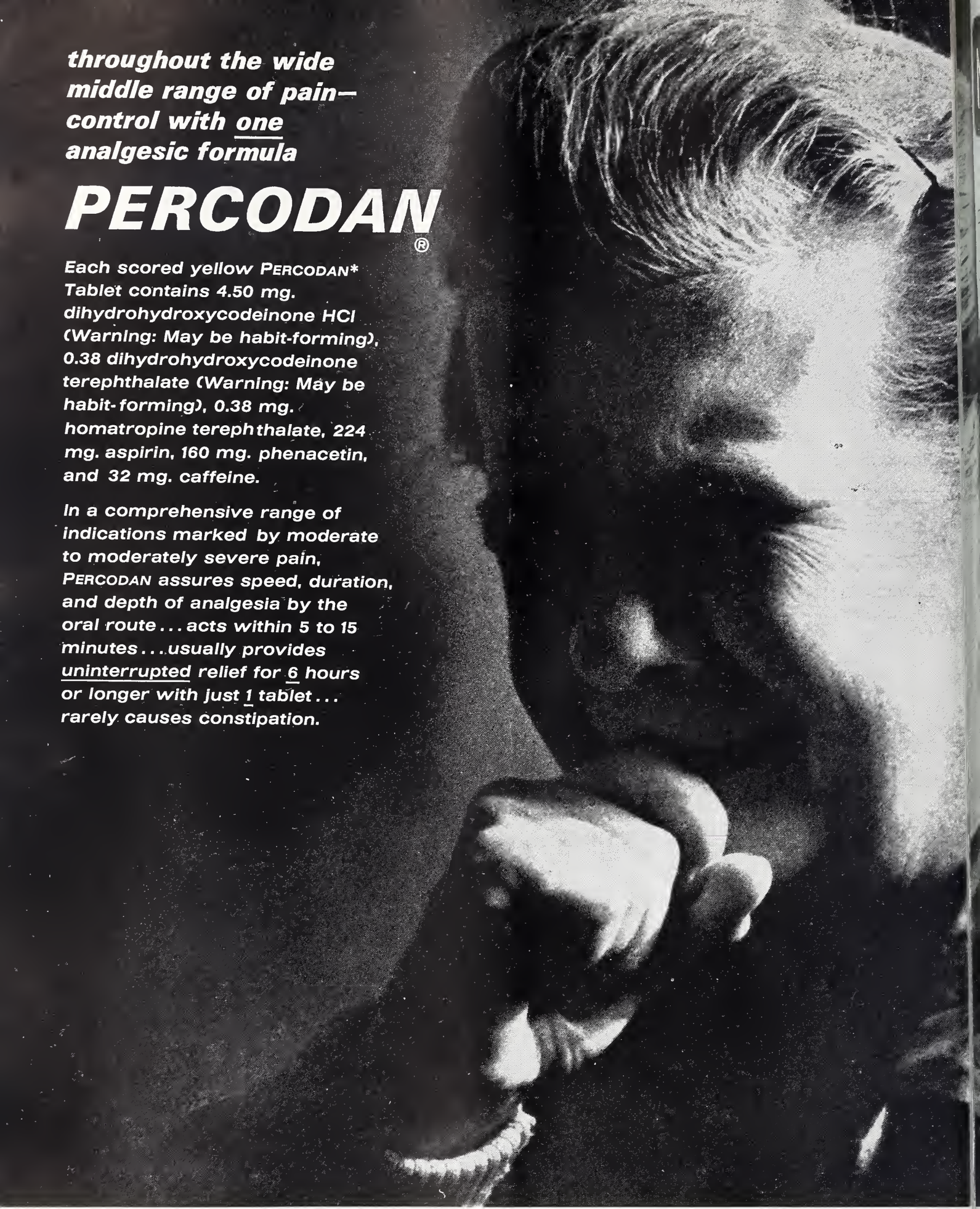
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NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION
JACKSON, MISSISSIPPI

August 1963

Dear Doctor:

The recent AMA decision that "it is unethical for a physician to have a financial interest in a drug repackaging company" poses new questions. Action at Atlantic City meeting made no provision for stock and ownership disposal terms nor was time limit imposed upon doctors who purchased interests in repackaging and relabeling firms. Problem is further complicated by financial distress of many such companies and declining value of shares.

> Three other edicts in ethics permit physician participation by ownership of economic interests in health related activities. Ophthalmologists may ethically dispense glasses and all M.D.'s are free to own pharmacies, provided there is no exploitation of the patient, and stock in pharmaceutical companies they do not personally control.

Mississippi College, the state's oldest four year school, will offer a credit course in aging this fall. Included will be economic, social, and health aspects with studies of work in field of various groups and legislative considerations. Professor A. E. Freathy will teach the course.

New and unique guide on legal problems of disposition of bodies for teaching purposes is available to physicians. Entitled "Leaving Your Body to Medical Science," the booklet is free from AMA Chicago headquarters. Authors are members of medicolegal committee and staff attorneys.

The Internal Revenue Service, not exactly a favorite among federal agencies, should lose a few more friends after a recent health care ruling. IRS revised regulations to remove implication that only payments to licensed, qualified practitioners are deductible. Payments to chiropractors and assorted irregulars qualify, even though they are not or need not be licensed. Ruling is 63-91, IRS Bulletin 1963-21 (May 27, 1963).

Newton Minnow's "vast wasteland" looks as though it has a brand new medical application. Proceeding on premise that no cure for insomnia can top TV, a French firm is marketing a gadget resembling small video set. A gray-blue image on screen expands, shrinks, and fades at measured rate, inducing sleep. Tests at Puritan Center Hospital, Toulouse, were successful. And it costs only $25.

Sincerely,

Rowland B. Kennedy
Executive Secretary

DATELINE - MEDICAL AMERICA

Officers Of Kaput Dental Service Plan Are Arrested

New York - Two dentists, an attorney, and two executives, all former officers of the bankrupt Dental Insurance Plan, were arrested after N.Y. state insurnace department alleged a $300,000 shortage in accounts. DIP had 85,000 subscribers, mostly members of labor unions. Charges filed say officers paid bribes and kickbacks. Plan was chartered in 1959 under New York laws applying to Blue plans.

Tobacco-Health Controversy Results In Curtailed Advertising

Washington - The Tobacco Institute, trade association for major cigarette makers, will no longer advertise in publications and TV programs "directed at particularly youthful audiences." Recent action was second by industry since Atlantic City AMA meeting, showing sensitivity to tobacco-health hassle. First was termination of cigarette ads in campus papers and athletic programs. Thirteen state medical associations are now on record against smoking. AMA has taken no formal action but may do so after U.S. Public Health Service reports on studies now in progress.

Social Security Flim-Flam Is Bigger Than You Think

Chicago - New actuarial findings conservatively fix Social Security tax as a sorry expenditure of earnings upon which income tax must also be paid. A wage earner beginning at age 20 and working for just $4,800 per year until age 65 would pay almost $55,000 over his productive years. Same amount invested privately and accumulated at only 3 per cent in insurance and savings would be double this sum. Taxpayers have no vested interest in such taxes paid nor any guarantee of benefits as insurance provides.

Rhode Island Physician Strikes A Blow For Health

Providence - Dr. A. A. Savastano, an orthopaedic surgeon and boxing fan, wants to make the sport safer before those demanding that it be abolished have their way. The doctor, who hasn't missed a Madison Square Garden match in years, proposes a second foul line and elimination of boxing gloves. Objective is to prohibit blows to head and neck and make striking hands hurt with hard punches. N.Y. has instituted experimental "safety" program of two minute rounds, eight instead of six ounce gloves, and four ring ropes instead of three.

ODMC Moves To Colorado

Denver - The Office for Dependents' Medical Care moved from Washington to Denver last week to reopen operations September 1 in its new location. Mississippi State Medical Association will continue to service physicians' claims and make payments without interruption during transition. Medicare offices will be located in giant Fitzsimons General Hospital.

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
August, 1963, Vol. IV, No. 8

ORIGINAL PAPERS

Radiation Sequelae and Treatment

DONALD N. ANISHANSLIN, M.D.
Memphis, Tennessee

Excessive radiation both from x-ray and from sunlight is now recognized medically as a carcinogenic factor. The author discusses the etiology of skin cancer and keratosis. In conclusion, he considers dermabrasion as a method of management for these conditions.

EXCESSIVE RADIATION from x-ray is a well-known carcinogenic factor (Figure 1). The American way of life gives more time and money for recreation. Much of this relaxation time is spent outdoors. Excessive radiation from sunlight, the healthy suntan, apparently is not recognized as carcinogenic.

Blum[1] has presented statistical evidence that ultra violet rays of sunlight stimulate the production of cancer in the skin of susceptible individuals. His more recent experimental laboratory work[2] offers additional support for this observation.

Malkinson and Rothman[3] found 91.1 per cent of skin cancers on the exposed areas of the face, ears, neck, and hands, and only 6.5 per cent on nonexposed parts of the chest, back, and abdomen. Texas has the highest incidence of skin cancer in the population of any state in the union. Truck drivers, locomotive engineers, and individuals who spend many hours with the left cheek exposed have a noticeable increase of incidence in skin damage,[4] with residual senile keratosis and skin cancer.



Figure 1. Man, aged 42, with severe mottled hyperpigmentation, telangiectases, atrophy, and a multitude of keratoses. He had received numerous x-ray treatments for acne vulgaris 25 years previously. The central ulcerated lesion on distal end of nose is basal cell carcinoma. Note the normal texture of the left ear, temple, forehead, and inferior aspect of neck, which was protected with a lead shield during treatments.

The ultra violet wavelengths that are presumably carcinogenic for humans are those of

3,200 A units and shorter. Responses of normal skin to exposure to ultra violet rays are erythema, pigmentation, and thickening of the corneum. Mackie and McGovern[5] believe that erythema is due to a direct effect of the ultra violet light upon the vessels of the subpapillary vascular plexus, and that changes in the epidermis are caused by changes in the dermis with its collagen degeneration from the subpapillary plexus damage. McGovern and Mackie[6] have reported that histologically the collagen of the subpapillary plexus region is replaced by a mat of elastic fibrils, and the vessels in this area are dilated. As this process encroaches upon the epidermis, the mat of elastic fibrils slowly becomes homogenized and the overlying epidermis may undergo atrophy.

Collagen degeneration is dependent upon light rather than age and may occur in fair-skinned teenage persons who are exposed to excessive amounts of sunlight. Clinically, overexposure to sunlight manifests itself as a mottled reticulated pigmentation. Pinhead size, yellowish areas may also be observed with progressive degeneration. The skin becomes dry, wrinkled, less elastic, and atrophic, with white sclerotic spots, pigmented areas and telangiectases.

Surgical dermabrasion of the face for actinic degeneration from excessive sunlight removes the epidermis[7] and the uppermost dermis. The degenerated collagen is replaced by new normally staining collagen, and the new epidermis is derived from the cutaneous adnexa. This skin has a new smooth texture whose cells have not been genetically changed by the years of exposure to sunlight.

The dermabrasion planing procedure should be done with the use of Freon 114. Freon delivered onto the skin in the form of a fine mist-like spray produces a degree of anesthesia which will allow the abrasive procedure to be done with absolute comfort and without a general anesthetic. Actually, Freon should be used even if a general anesthetic is desired because the depth of planing

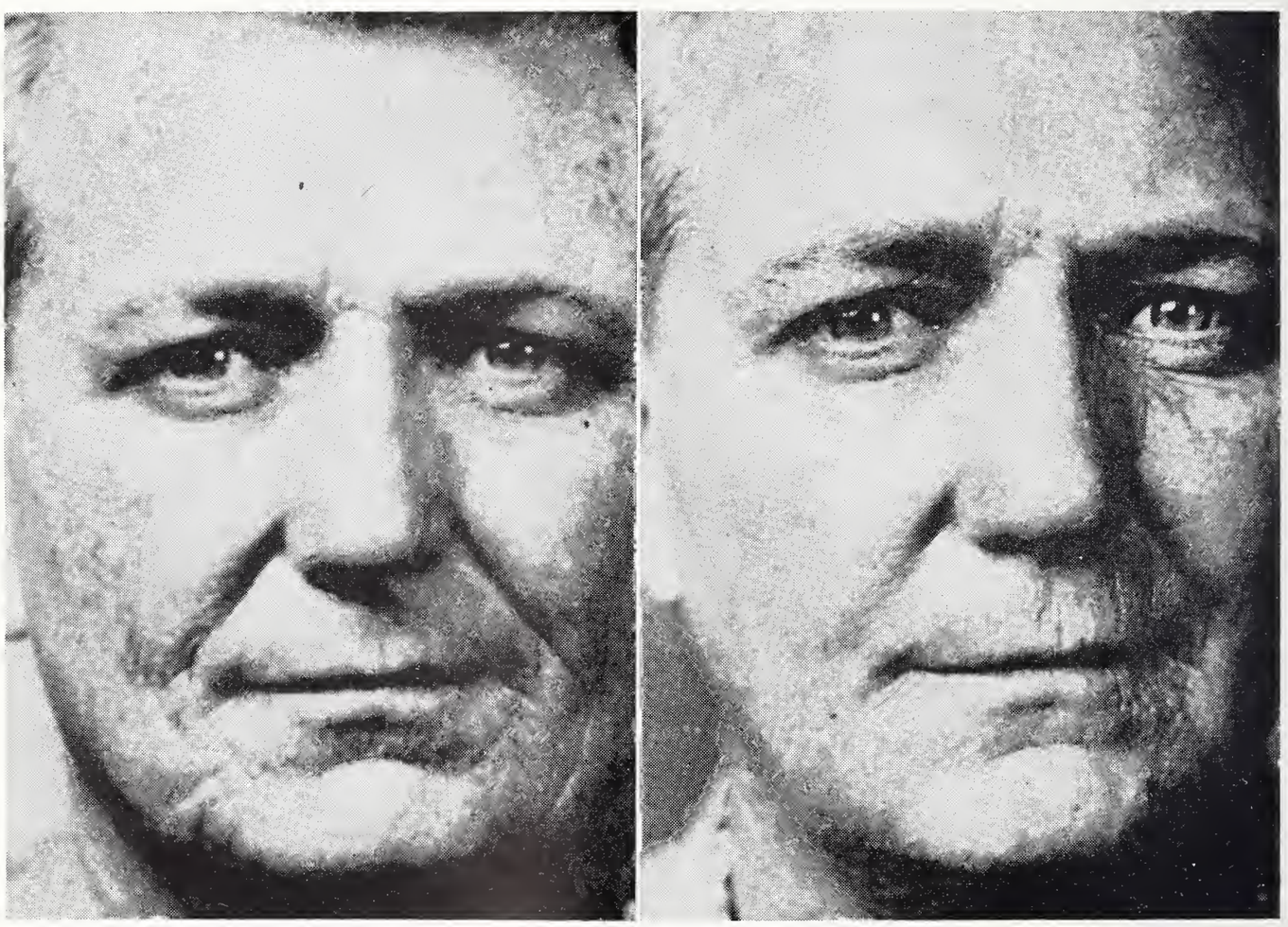


Figure 2. (A) Man, aged 46, with marked cross-hatched wrinkling, mottled pigmentation, and keratosis. This patient has fair skin and had experienced long-continued sun exposure. (B) Same patient, eight months after dermabrasion. There is marked improvement in fine and medium wrinkles, moderate improvement in deep wrinkles related to muscles of facial expression. This improvement was still maintained two years later.



Figure 3. A. Woman, aged 50, with radiating lines around mouth, marked persistent freckling, and telangiectases over molar region of both cheeks and nose. B. Same patient, four months after dermabrasion. There is marked improvement in fine and medium wrinkles and no recurrence in mottled pigmentation and freckling.

in the bloodless field can be followed by the changes seen in the abraded area. No pigment means the basal layer of cells in the epidermis has been removed. The next plane reveals the yellowish macules seen in the uppermost dermis and yellowish papules indicate one has cut across the sebaceous glands. This is the maximum desired depth. The great vascular bed in the face helps prevent deep freezing. The average depth frozen is 2 mm., and this frozen area helps insulate and prevent deeper areas from being frozen.

Separation of the crust, which forms on the face within 24 hours, begins about the fifth or sixth postoperative day and is complete by the eighth or ninth day. The new skin is erythematous, but this gradually diminishes over a period of several weeks. It is advisable for the patient to protect himself from direct exposure to sunlight for at least two months after the dermabrasion to minimize the damage to the very thin, new epidermis.

The rate of recurrence of collagen degeneration and skin cancer appears to be greatly diminished after dermabrasion on two and four year follow-ups on these patients. However, the prophylactic effect is relative, not absolute. ★★★

220 South Claybrook

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CAUTIOUS CANINE

A dog owned by Mrs. Margaret Sulter of Fleet, England, says *Insider's Newsletter,* has taken to smoking cigarettes and is now up to a pack a day. But Mrs. Sulter isn't worried. "He doesn't inhale," she says.

Radiologic Seminar XVI: The Value Of the Upright Views in Cholecystography

CAMAL PETRO, M.D.
Jackson, Mississippi

PROPERLY PERFORMED, oral cholecystography is by and large a safe, practical, and accurate procedure for evaluating the status of the gallbladder. It is the object of this article to emphasize the importance of routinely obtaining a radiograph with the patient in the upright position as part of the examination.

Fecal contents, gas, or unabsorbed contrast medium, usually lying in the region of the hepatic flexure of the colon or the duodenum, may obscure finer details and make evaluation of the gallbladder difficult. In the erect position the relations of the gallbladder and intestine may change, throwing the gallbladder clear of confusing shadows. At times the shift in position of calculi with the gallbladder between the recumbent and erect position may be of aid in the diagnosis, and if a small filling defect in the gallbladder does not shift between these two projections, one must be suspicious of either an embedded stone or a polypoid lesion.

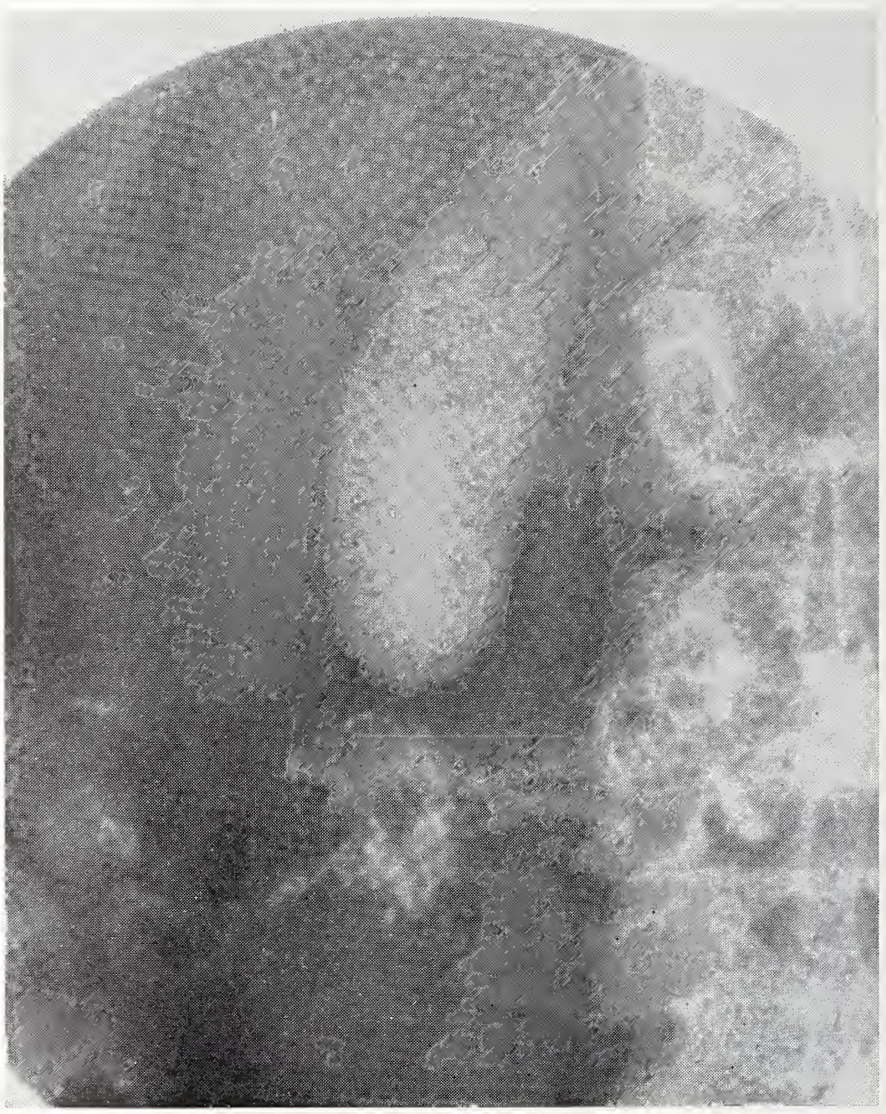


Figure 1. Recumbent raidograph from a cholecystogram showing good opacification and a suggestion of multiple small filling defects within the lumen of the gallbladder.

Of interest, and occasionally of considerable diagnostic value, is the phenomenon of layering or floating that is observed in the erect position when small cholesterol stones are present in the lumen of the gallbladder. This layering effect is well demonstrated in the accompanying illustrations. At times the presence of such calculi may be appreciated only in the erect position.

Sponsored by the Mississippi Radiological Society.

The explanation for layering of gallbladder calculi has been the subject of considerable investigation. It is related to the transient increase in the specific gravity of the gallbladder bile, due to its iodine content. It has been shown by experiments that the smallest cholesterol stone has a specific gravity of 1.040, while native bile has a specific gravity of approximately 1.030. Gallstones will float in bile whose specific gravity is nearest its own. It would seem from this that in order for the specific gravity of gallbladder bile to reach 1.040 something must be added, and in cholecystographs the iodine content is sufficient to raise the specific gravity of bile so that these small stones may float (Figure 2).

For the above reasons one cannot consider a cholecystogram as being negative in the absence of an erect radiograph. ★★★

5320 Meadow Oaks Park Dr.

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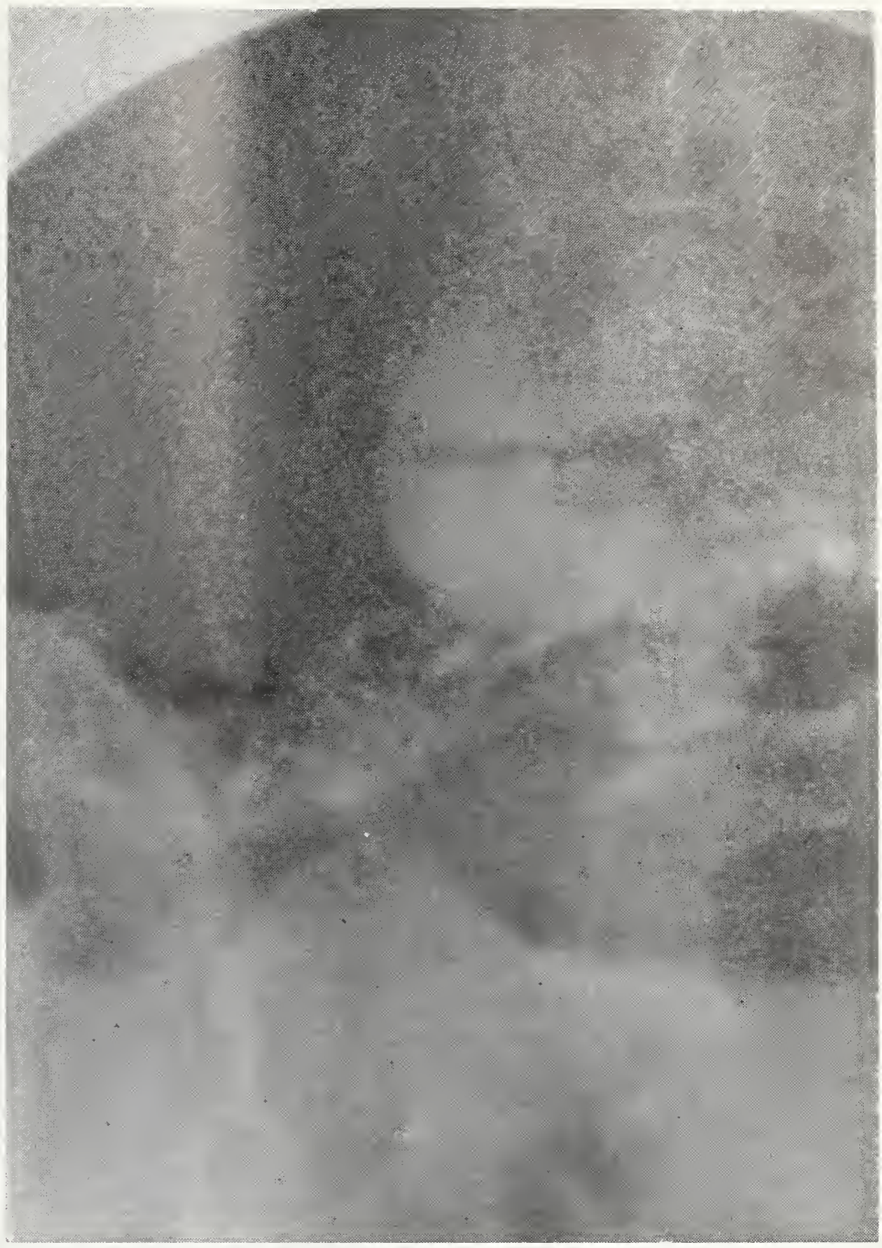


Figure 2. Erect radiograph on the same patient, demonstrating the layering effect of the multiple small cholesterol calculi to good advantage.

NOTE OF DISTINCTION

A veteran diplomat reports on the difference between a diplomat and a lady. When a diplomat says "yes," he means "maybe"; when he says "maybe," he means "no," and if he says "no," he's no diplomat. When a lady says "no," she means "maybe"; when she says "maybe," she means "yes," and if she says "yes," she's no lady.

Clinicopathological Conference XLIII

Conducted by the Department of Pathology
Mississippi Baptist Hospital
Jackson, Mississippi

THIS 18-MONTH-OLD white girl was first seen by her physician on Jan. 7, 1963, with a history of cough and cold for three days and was admitted to the local hospital on the same date. The mother stated that until the present illness there had been no cyanosis, shortness of breath, edema, squatting, or any other signs of disease and that the child had had a normal delivery and development. The temperature was 99 degrees, rectally; the pulse 120; the respirations 24, and the blood pressure approximately 80/50.

The major points in the protocol on this 18-month-old girl are cyanosis, an enlarged heart, and an enlarged liver. Although the patient appeared to be well controlled on Digoxin, she suddenly developed fibrillation and expired on the fourth hospital day. Discussers are Drs. William F. Sistrunk, Louis Schiesari, Robert R. Henderson, Charles E. Mangin, and Howard H. Nichols.

Positive physical findings were that the baby appeared in no distress. The pharynx and nasal mucous membranes were moderately injected and there were scattered, coarse pulmonary rales. No cardiac murmur or cardiac enlargement was detected. White cell count was 20,800 with 40 per cent segmented neutrophils and 60 per cent lymphocytes. The hemoglobin was 8.9 gm. per cent and the hematocrit was 31 volumes per cent.

The baby was treated with Ilosone, penicillin, Dimetane Expectorant (for one day), and elixir of phenobarbital. On the night of Jan. 8, 1963, the child's temperature went up to 102 degrees, rectally, and she became cyanotic. She responded to Pyralgin and oxygen by tent, and after this episode she remained afebrile while in the hospital.

A PA chest film on Jan. 9, 1963 was reported as follows: "The transverse diameter of the heart is enlarged, the superior-lateral aspect of the cardiac silhouette is somewhat peculiar in that there is a suggestion of a superimposed density in this area. There is some increase in the bronchial-vascular markings bilaterally. The film is somewhat light in technique, and while the findings are probably that of some sort of cardiac abnormality, a parenchymal lesion in the left upper lung field overlying the cardiac silhouette cannot be entirely excluded. To further evaluate this it is felt that a left lateral view should be done."

Re-examination of the baby on Jan. 9, 1963, revealed no clinical distress. The baby was not tachypneic. There was no excessive tachycardia and no edema. The liver was not palpable. Oxygen was discontinued, and the child had an uneventful day. At 6:00 p.m. on Jan. 9, 1963, the child had a convulsion and became cyanotic. Oxygen was restarted and Luminal, ¾ grains I.M. controlled the convulsion after about 20 minutes. She was also started on penicillin, I.M.

On Jan. 10, 1963, a second x-ray examination was reported as follows: "Re-examination of the chest, which is somewhat better in technique, again reveals a marked cardiac enlargement with a nonspecific contour; the exact etiology of this enlargement cannot definitely be established from this study. The lung as best as can be ascertained by the PA and lateral view fails to reveal any obvious infiltration or congestive changes."

An EKG made on Jan. 10, 1963, revealed marked right axis deviation with nonspecific ST and T wave changes. Re-examination on Jan. 10, 1963, revealed a child in serious distress. There was cyanosis of the lips under oxygen, the nail beds were pink, and the pulse was 160 at rest. The liver was down 3 cm. The child was given

0.25 mg. Lanoxin and transferred to the Baptist Hospital in Jackson.

On admission the pulse was 160, the respiration 38, and the temperature 102 degrees. There were a few scattered coarse rales and a few rhonchi on both bases posteriorly. The heart was enlarged to percussion to the left anterior axillary line. The liver was percussed to four finger breadths below the right costal margin. The lips were cyanotic, and the child was described as lethargic and irritable.

The WBC was 17,200 with 2 monocytes, 29 lymphocytes, 66 segmented neutrophils, and 3 bands. X-ray of chest revealed an enlarged heart and clear lungs. After an apparent improvement with better respirations and better heart sounds, the child suddenly developed fibrillation and expired 12 hours after admission.

DISCUSSION

Dr. William F. Sistrunk: "I would like to give the floor to a cardiologist on this one. This child was 18 months old when first seen by her doctor early this year. She had a history of having done well up until that time with evidently a normal development. Then she developed some fever and rapid respirations and was admitted to the hospital with what appeared to be a bacterial type pneumonia. She had rales in the chest, a white cell count of 20,800, and a hemoglobin of 8.9 gm. per cent. This would be some degree of anemia whether it was due to the stress of infection or previous underlying anemia. I think it probably could be either.

"The child evidently responded to penicillin and Ilosone in the hospital until about 36 hours after admission when her temperature spiked again. She became transiently cyanotic and was placed in oxygen and seemed to improve. A chest x-ray at that time revealed an increased transverse diameter of the heart, and it was noted that 'the superior-lateral aspect of the cardiac silhouette is somewhat peculiar in that there is a suggestion of a superimposed density in that area.' This, of course, suggests a number of possibilities, including extracardiac as well as intracardiac or supracardiac vascular type lesions. There was some increase in the bronchial vascular markings bilaterally that could reflect some degree of pneumonia or shunting into the pulmonary tree which would increase pulmonary flow.

"About three days later the child seemed to be a good deal better. There was no tachycardia and no edema, and the liver was not palpable. The oxygen had been discontinued. Then about 72 hours after admission the child became acutely cyanotic again and had a generalized convulsion. This was treated with oxygen, Luminal Sodium and evidently the convulsion was controlled. The child was started on penicillin.

"A repeat chest x-ray was made on Jan. 10, 1963, which would be just about 24 hours from the previous film. This second x-ray was noted to be 'somewhat better in technique and to reveal a marked cardiac enlargement with a nonspecific contour.' However, it was observed that the exact etiology of this enlargement could not definitely be established from this study. The radiologist also comments that this film fails to reveal any obvious infiltration or congestive changes in the chest at that time. This makes the diagnosis of a lesion that would put increased blood flow into the pulmonary tree less likely.

"An electrocardiogram made on Jan. 10 revealed marked right axis deviation with nonspecific ST and T wave changes. Later the same day the child began to go progressively downhill. There was cyanosis of the lips under oxygen, but there is a specific comment here that the nail beds were pink, peripherally, and the pulse was 160 at rest. The liver was down 3 cm. The child evidently was slipping into what seemed to be irretractable cardiac failure. Digoxin was given in a stat. dose of .25 mg., which would be a good initial stat. dose for a child of this size, and she was transferred to the Baptist Hospital in Jackson.

ADMISSION DATA

"On admission the pulse was 160 per minute, temperature 102 degrees, respiration 38. There were scattered coarse rales in the chest and more evidence of cardiac failure in that there was an enlarged heart clinically at that time, and the liver was palpable four finger breadths or about 6 to 7 cm. below the right costal margin. Again the lips were noted to be cyanotic. There was no comment about the nail beds at that time, although one gets the impression that this was a generalized cyanosis by then. There was evidence of infection reflected in the white cell count. X-ray of the chest at the Baptist Hospital which we have here revealed an enlarged heart with clear lung fields. The child soon went into atrial fibrillation, and 12 hours after admission she expired."

Dr. Louis Schiesari: "Do you want to see the x-ray films?" (Figure 1.)

Dr. Sistrunk: "Yes, and I would like to see the electrocardiogram. Do you have that tracing?"

Dr. Schiesari: "No."

CPC XLIII / Baptist Hospital

Dr. Robert A. Henderson: "The clear lung fields seen on this film are not of any significance in ruling out congestive failure in a child. The liver is the most reliable indication distal to the heart. The heart shows marked enlargement or dilatation, but without any specific chamber enlargement that can be determined. EKG changes are more reliable than a single AP film particularly in evaluating right or left enlargement. No marked left auricular enlargement can be demonstrated in this case. This is one chamber that can often be evaluated very satisfactorily on a



Figure 1.

single anteroposterior projection, and this is sometimes a clue in the diagnosis of endocardial fibroelastosis."

Dr. Sistrunk: "Do you think there is narrowing of the superior mediastinal vessels?"

Dr. Henderson: "No, the mediastinal shadows are not prominent, but this could be related to an apical lordotic type of projection which tends to narrow the mediastinal structures as projected on the film. On the supine film, which is the common positioning for infants, it is possible to miss a small amount of pleural fluid, but large amounts can be picked up quite easily, presenting as a homogeneous density in a hemithorax. There are several reasons why supine films are used primarily in infants. There is no significant magnification of the heart in an infant, even at a 40 inch distance, because the heart is quite close to the film. By extending the arms above the head and by stretching the legs, it is easy to expand the

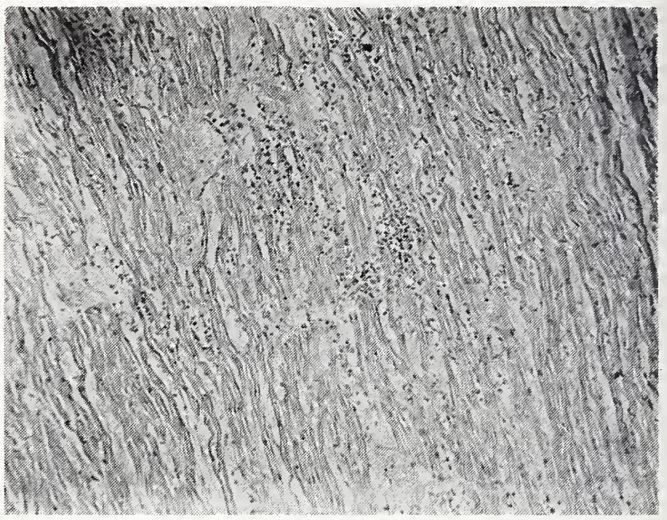


Figure 2.

lungs in an infant. When he takes in a deep breath, you can readily see the good expansion of the lungs. This is the most important factor in evaluating lung detail in an infant. If the film is in expiration, it is next to impossible to attempt to interpret the lung findings."

Dr. Charles E. Mangin: "Is there a possibility of a lesion of the left upper lung?"

Dr. Henderson: "I do not see any lesion in the left upper lobe on our film. With such massive enlargement of the heart, there will occasionally be an atelectasis produced by pressure on the bronchus, but this is usually the left lower lobe rather than the left upper lobe."

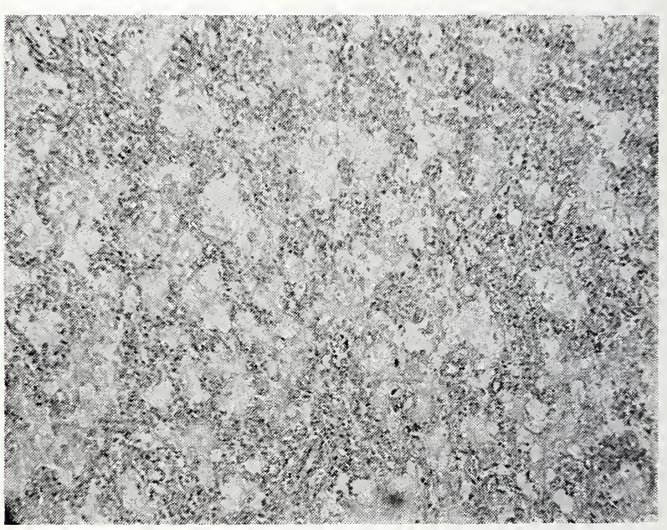


Figure 3.

Dr. Schiesari: "Dr. Nichols, would you like to tell us something about this case?"

Dr. Howard H. Nichols: "All past history up until the baby came in here is just as we have it here. We kept up digitalization with the Digoxin, and we thought we had given an adequate dose within nine hours after the child came in. After that time, we were encouraged by the way the baby looked. She appeared to be out of respiratory distress and was breathing more easily. She was not cyanotic and was not sweating and grunting as she was on admission, that is, with every expiration she gave a little grunt as babies will do in failure. All of a sudden, however, the baby had an acute episode of cyanosis, cried out, and the best I could say is that the heart sounded like it was in fibrillation.

"I might also note that on admission no murmur was heard, but the sounds appeared rather distant and didn't have a good tone quality. The next morning prior to this fibrillation episode the tones sounded much improved, and it seemed as though we were getting a better, more forceful beat. This was after the baby was digitalized. The heart rate had slowed down. I don't think it's mentioned in here, but some 30 minutes prior to the baby's death the cardiac rate was about 150, which was an improvement from about 160 on admission."

Dr. Mangin: "Did you hear any friction rub at all?"

Dr. Nichols: "I did not. At first, on hearing these distant sounds I wondered about a fluid, but by the next morning the sounds were so much better that I pretty much ruled that out."

Dr. Sistrunk: "This child was a well-developed baby as far as you know?"

Dr. Nichols: "Yes. I didn't see anything about the family history. They had lost another child at about eight or nine months of age from what was said to be endocardial fibroelastosis, another heart condition which is usually fatal and the etiology of which is not clearly understood."

Dr. Mangin: "On the first hospital day there really seemed to be little reason for the admission since the child presented only cough, cold, and a rectal temperature of 99 degrees. It makes you wonder why the child was admitted at all."

Dr. Nichols: "It seemed like the child was really sicker than that. There was evidence of pneumonitis for which the child was treated for a couple of days before admission to the hospital. Then the physician was getting worried and the mother was getting panicky, and I think maybe this was why she was admitted. The dietary history was very poor."

Dr. Sistrunk: "This could be a lot of things. The more I look at these x-rays, the more I think that there is not that much increased pulmonary flow, though maybe some, shown on these pictures. I would also like to note that there was probably not cyanosis until the child received an insult and that there was not a history of chronic pneumonitis, as we frequently see in endocardial fibroelastosis. I have also thought a great deal about an anomaly of the pulmonary venous return which can give this type picture. I think maybe with this central cyanosis, so to speak, with some shunting of the periphery without cyanosis, I would probably put an anomalous pulmonary venous return as second. I think I might just stop right there. I think going on from there would be a loss of time. I believe the child had a congenital cardiac lesion that would not give an anomaly and yet would throw the child on into failure at this age. I think I'd say transposition, first, and as second choice an anomalous pulmonary venous return."

Dr. Schiesari: "At autopsy the heart weighed 155 gm. which is about three times the normal weight for a child this age. It was uniformly enlarged. All the chambers were dilated, but the left ventricle much more so. No congenital abnormality was noted either in the larger vessels or in the heart itself. The right lung weighed 140 gm. and the left lung weighed 110 gm. which is about twice the weight for this age. The upper lobes were fairly well aerated, but the lower lobes were heavy, soggy, congested, and edematous. Microscopical examination of the heart (Figure 2) revealed diffuse lymphocytic infiltration of the interstitial spaces, with marked interstitial edema and a variable degree of degenerative changes in the muscle fibers.

"In the lungs (Figure 3) the alveolar septa were increased in thickness, with infiltration of monocytes and lymphocytes. In the alveolar spaces there was a large amount of dense, pinkish fluid, often coating the alveolar walls, in the fashion of a hyaline membrane. The alveoli in general were lined by cuboidal prominent septal cells. This is the picture that one sees in many cases of, for example, influenza virus pneumonitis but it is not pathognomonic of this disease since it can be encountered in many viremic infections. From these anatomical findings we may conclude that this child had an overwhelming viremia which manifested itself anatomically with myocarditis and pneumonitis." ★★★

1190 North State St.

SPECIAL ARTICLE

The Fedicare Folly

GEORGE M. FISTER, M.D.
Ogden, Utah

Speaking before the open session of the House of Delegates, Dr. Fister challenged Mississippi physicians to inform the public on the truths about the current King-Anderson legislation. The basic issue, he said, is not health care for the aged versus no health care; it is how the care shall be provided.

In line with Dr. Fister's address, the House approved a recommendation that proposed bills on federal medical care for the aged be termed "Fedicare" rather than "Medicare." The recommndation noted that "Medicare" is the name of a program for dependents of armed services personnel and therefore is erroneously applied to King-Anderson and other like bills.

FREEDOM IS MORE than a word. And it is only one step or one day or one year or one generation away from destruction—if there are not those who would defend it, speak up for it, fight for it, lose everything for it, and even die for it.

Perhaps each and everyone of us would do all these things in the face of a tyrant who would openly seek to destroy freedom and to establish a dictatorship. But who among us would do all these things in the face of a government which takes away this freedom bit by bit, piece by piece, making slow but deliberate progress toward the eventual destruction of the freedoms we have enjoyed or still do enjoy?

It was James Madison who warned the Virginia Convention back in 1788 this way: "Since the general civilization of mankind, I believe there are more instances of abridgment of the freedom of the people by gradual and silent encroachments of those in power than by violent and sudden usurpation."

Are not his words appropriate in our time, or at any time? Is it not true that for three decades our nation has watched in almost helpless frustration at the "gradual and silent encroachments" of government on the freedom of the American farmer? Is it not true that for two decades our nation has watched the attempts by government, by "gradual and silent encroachments," to reduce the freedom of American medicine? Fortunately, the medical profession, its allies, and the American people have taken militant action for 20 years against these attempts to abridge doctor and patient freedom, and generally these attempts have been thwarted.

But the attempts continue. The threats go on almost relentlessly. And we do weary. We do sometimes falter in our fervor. We do wonder if victory will ever come. And again we must turn to the words of a Revolutionary patriot for some stirring words of warning and advice: "These are the times that try men's souls. The summer soldier and the sunshine patriot will, in this crisis, shrink from the service of his country; but he that stands it now, deserves the love and thanks of man and woman. . . . Heaven knows how to put a proper price upon its goods; and it would be strange indeed, if so celestial an article as Freedom should not be highly rated."

And later in his work, "The American Crisis," Thomas Paine wrote: "Those who expect to reap the blessings of freedom must, like men, undergo the fatigue of supporting it."

I believe that it is more imperative now than ever before that we understand clearly the principles of freedom, individual incentive, individual

1962-63 President, American Medical Association.

Read before the House of Delegates, 94th Annual Session, Mississippi State Medical Association, Biloxi, May 13-16, 1963.

reward, private enterprise, and political liberty which have so greatly enriched the lives of the American people since Madison, Paine, and the Revolution. And we must heed the warnings of gradual and silent encroachment by our willingness and dedication to fight for the blessings of freedom so that the young men and women of tomorrow can work unfettered for the continued improvement of America's health.

KING-ANDERSON IMPLICATIONS

The implications of the current King-Anderson legislation are of the deepest concern to all Americans, not just to physicians or the health professions. The outcome of this legislative battle will have profound effects on the quality of medical care available to all Americans in the future. It will determine whether more of their economic and political freedom is whittled away or whether the nation has profited from the bitter lessons of past government intervention in the private affairs of citizens.

Basically, the administration is proposing to create a system of government-controlled health care for the aged. A substantial increase in Social Security taxes would finance hospitalization and nursing home care for everyone who has passed his 65th birthday without regard to an individual older person's financial need. Millions of senior citizens who are self-supporting and able to take care of their own needs would thus be eligible for care at the expense of the younger generation. This would be an extravagant waste of public funds.

It would be a new burden on those raising families and buying houses—and paying their own medical expenses and insurance premiums. It would load the Social Security system with a new type of obligation that could be expanded almost without limit. At the same time, the government would exact the power as provided in the King-Anderson bill to limit the extent and type of health care for millions of elderly Americans seeking benefits under the program.

The basic issue in this controversy is not health care for the aged versus no health care at all if the King-Anderson bill does not pass. This is what the Administration spokesmen would have the nation believe. Nothing could be further from the truth.

The issue is: How shall the care be provided? Shall the program be compulsory or voluntary? Shall added taxes be levied on wage earners and employers to provide government benefits indiscriminately to a vast segment of the population including millions of the self-supporting? Shall medicine be permitted to grow and flourish in freedom or shall it be stunted and shriveled by the excesses of government control?

One of the first things physicians must do is to insist that the truth be told—accurately and honestly. Second they should tell the true story about King-Anderson, and they should give the facts about new King-Anderson taxes and so-called "contributions," about the compulsory aspects versus a voluntary selection of the mechanism of financing one's health care, about helping everybody or helping the needy and near-needy, about the real economic and health status of the aged as compared with the claims of "destitution" and "physical wrecks," about voluntary enterprise and government intervention, and about the true costs of Social Security medicine versus the claims of "pennies a day."

I remind you that the Gallup Poll in December 1961, showed that approximately 67 per cent of the American people favored some health care program via Social Security. But in February 1962, this percentage had dropped to 55, in May it had dropped to 48, and later, after the Madison Square Garden address of President Kennedy and Dr. Annis, the percentage of support dropped to 44 per cent.

Your job and mine is to continue to tell our story of truth so that the percentage of support for King-Anderson continues to drop. The major responsibility for telling this true story is in the hands of the physicians, the county medical societies, and the state medical associations.

KERR-MILLS PROGRAM

One of the major points in the story must be the Kerr-Mills program and its rapid implementation. As you know, the AMA has strongly supported a federal-state grant-in-aid type of program to provide health care to persons over 65 who need help. We supported the Kerr-Mills bills when they were first proposed, and the Congress, by a large majority, adopted them. Since then we have worked closely with the state societies and other organizations to implement the Kerr-Mills Act as rapidly as possible.

In the brief time it has been on the statute books, Kerr-Mills has enjoyed a remarkable record of acceptance to fill the need for which it was designed. Today 93 per cent of the 17½ million elderly live in states that have enacted legislation under all or part of the Kerr-Mills law. This is the record, the facts, and the truth. So when proponents of King-Anderson contend that Kerr-Mills is a failure, they simply are not telling the truth.

Likewise, when these same proponents of King-Anderson tell the American people that voluntary

health insurance cannot do the job, or is not doing the job of providing good coverage for the aged, they are not telling the truth. It is a fact that at least 60 per cent of the aged, according to records of the insurance industry, already have protected themselves from the cost of illness through voluntary health insurance and prepayment plans. And it is a fact that a wide variety of voluntary health insurance policies especially designed for older people has become available during the last two years. Millions more are protected by private pension plans, veterans' benefit programs, accumulated resources, or families willing to help. These elderly persons are not dependent on the expenditure of tax funds for their care.

THE AMA STORY

Finally, physicians should know the full story of the American Medical Association because the King-Anderson proponents are using one of the oldest tricks to win support for their scheme, i.e., maligning their opponent. This, undoubtedly, is a deliberate and intentional part of their campaign. If it were not, an attack on the AMA would not be a part of almost every discussion, speech and interview in which King-Anderson proponents participate. For example, on May 4 the Illinois Democratic senator charged—and how many times have we heard this tired accusation—that the AMA has opposed all progressive legislation.

The truth is that the AMA has compiled a long, distinguished, and enduring history of achievement in advancing the science and art of medicine. In the last three sessions of Congress, or the last six years, the AMA has supported 51 bills while opposing only 14. A negative record? Hardly? It was the AMA that urged establishment of state boards of health, recommended a department of health in the President's Cabinet, recommended the creation of the U. S. Public Service and the Federal Food and Drug Administration, supported and promoted the Kerr-Mills Law, pushed for proper labeling of household chemicals, endorsed the principle of a program of voluntary, contributory health insurance for federal employees, recommended and supported scores of important pieces of local, state, and federal legislation throughout its 116 years for the improvement of the science of medicine and the betterment of the public health. This is the true story of the AMA. Physicians should be telling it to the American people and should be rebutting the mud-slinging tactics of AMA's opponents.

This should be remembered too: It is the AMA that is leading the fight to preserve the private practice of medicine, the freedoms of patients, and free enterprise system in this country by opposing vigorously political schemes to place the control and domination of a great profession and the patients in the hands of the federal government.

If the Democratic senator from Illinois and the other proponents of King-Anderson consider this to be negative opposition, then so be it. But I place this kind of AMA action on the positive side of the ledger, and I believe that is where it belongs. In the fight for freedom one must be opposed to government intervention and federal compulsion.

Medicine, doctors, and the AMA always have been *for* freedoms of patient and physician. We always have been *for* the voluntary way and the free enterprise system. We do not intend to change or to back away from these convictions and these principles now in the fight against government—no matter how big it is.

Our basic position is sound if we keep up our courage, if we believe in victory rather than in defeat, if we don't yield to compromises which in effect undermine our entire position, and if we all remember to tell our story often and effectively, we shall win. ★★★

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SO OKAY RACHAEL CARSON

To control the insect pest known as the woolly aphid, the U. S. Forest Service is relying not on chemical pesticides but other insects. It has introduced 22 kinds of beetles that won't harm anything in the world except woolly aphids.

Insider's Newsletter

Mississippi Medicine and Workmen's Compensation: A Role of Service

GEORGE D. PURVIS, M.D.
Jackson, Mississippi

Since 1956, MSMA's Committee on Occupational Health has been engaged in studies of workmen's compensation, employment climates, and rehabilitation of the occupationally disabled. Important association policy has been evolved from these studies, including adoption and publication of formal guides relating to medical aspects of workmen's compensation and the position of Mississippi medicine on rehabilitation of those disabled in the course of employment.

For the first time, the work of the committee and the story of this policy evolution have been summarized in a single presentation by the chairman of the group. The article is adapted from a recent address to a nationally representative body concerned with compensation administration.

ALMOST 85 YEARS AGO, Terance Vincent Powderly, leader of the Knights of Labor, devised a catchy slogan. He said that "An injury to one is the concern of all." Mr. Powderly could not have possibly known that his expression of concern would someday become the underpinning of Workmen's Compensation laws which now exist in every state and territorial jurisdiction of our nation. History tells us that this fraternal organization passed from the American scene before the enactment of the first such statute.

The Mississippi State Medical Association was founded in 1856 and it will celebrate its 107th anniversary this year. The preamble of its constitution sets out specific objectives in conserving human life by eradicating pain, suffering, and disease to the extent made possible by present scientific medical knowledge. Physicians are interested in bringing quality and quantity medical care to all Mississippians regardless of age, sex, race, or economic circumstances. Any influence upon the lives, health, and well-being of people concerns physicians. An example of this is Mississippi medicine's views of Workmen's Compensation which may be stated in 125 words:

> "The Mississippi State Medical Association believes that self-reliance, exercise of personal initiative, and the opportunity to pursue gainful employment are among those factors contributing to the dignity of free men. Where loss of physical capacity occurs in the course of employment, all concerned have an obligation to assist individuals so affected in making physical, economic, and social readjustment. Rehabilitative and restorative services should be placed uppermost to afford opportunity for regaining self-reliance and economic independence. Physicians have continuing interests and responsibilities in Workmen's Compensation programs. Since they are concerned with the

Chairman, Committee on Occupational Health of the Council on Medical Service, Mississippi State Medical Association.

Read before the 17th Annual Conference, Southern Association of Workmen's Compensation Administrators, Biloxi, Miss., June 26-28, 1963.

conservation of health and life, they feel that rehabilitation of the occupationally disabled is the first goal of Workmen's Compensation and that all aspects of the program ought to assist in realizing that goal."

Because the association has voluntarily assumed responsibility in many scientific and socio-economic areas, it has become necessary to construct an organization complex geared to special requirements. Above all, Mississippi medicine is federated from the grassroots up. The voice of the physician in his county medical society is heard through his representative in the state-level House of Delegates which is the association's policy-making or legislative body. Investigations, studies, and proposals become policy only when examined and approved by a majority of duly authorized voting representatives.

MSMA COMMITTEE

To carry on this extensive work, there are elected and appointed groups known as boards, councils, and committees. Each has a specific area of assigned responsibility. The association tries to select as members of these several groups physicians who possess qualification, capacity, and interest in serving without remuneration in this work. One such group is the association's Committee on Occupational Health which is concerned with the subject under consideration.

This committee examines and studies health problems in industry, labor-management relations relating to health functions, Workmen's Compensation, employment climates, industrial care plans, and related areas. An objective of enormous importance is that of serving as a liaison mechanism between the association and appropriate representatives of management, labor, and other agencies and organizations having an interest in the labor-management field.

When the committee first undertook studies of Workmen's Compensation in 1956, its initial concern was employment of the physically handicapped. Early in these studies, it was tentatively concluded that employment of the handicapped is an obviously desirable goal and that a modification in applicable law was necessary to provide a maximum incentive for such employment. It was recognized that legal problems implicit in achieving this end should be identified.

At this point, it is appropriate to state what the Mississippi State Medical Association is *not* doing in this area:

—It is not in the business of advocating, proposing, or writing labor-management law. Physicians recognize and accept their responsibilities of fulfilling roles of service and as such, they are neither producers, vendors, nor a labor force serving either of the former.

—As an independent professional entity, medicine identifies its aims and objectives only with the health and general well-being of the total community. It would be highly inappropriate for physicians to identify professional service endeavors in terms of unilateral economic interests.

COMMITTEE STUDIES

In 1957, the Committee on Occupational Health initiated studies with respect to its continuing concern regarding employment climates as related to Workmen's Compensation administration, assumption of compensability in illness and injury where questions arise as to a relationship between the condition and the worker's occupation, and possible circumstances under which the handicapped might be extensively employed. Early in its studies, the committee recognized that there was a lack of definitive information and data available in this area. Accordingly, a study of national scope in these several connections was authorized.

Under the supervision of the committee, a suitable questionnaire was designed and pretested with which to elicit information on Workmen's Compensation from knowledgable sources throughout the nation. These included all state medical associations, some 40 state manufacturers (employers) associations, 50 state Workmen's Compensation administrative agencies, and labor and insurance groups. An overall response of more than 40 per cent was realized and these data were further re-enforced by submission of statutes, administrative manuals, regulatory materials, and policy views of the various groups to whom inquiries were directed.

The initial findings indicated employer reluctance to hire the handicapped extensively because of statutory provisions for compensation awards based on job aggravation of pre-existing physical conditions. It was only logical, therefore, to conclude tentatively that creation of an equitable employment climate for such handicapped workers is a three-dimensional endeavor which includes:

(1) Limiting employers' liability to a level consistent with compensation risks,

(2) Defining by law pre-existing conditions, and

(3) Requiring medical determination of such conditions prior to employment.

The committee was able to demonstrate a descending gradient in achievement of optimum employment climates throughout the several states with respect to these three circumstances in the order stated. An urgent need for precise and completely understandable definitions of the terms "injury" and "accident" in compensation law became immediately apparent. In many states, there was need for similar definition of "occupational disease." It was discovered that greater attention should be given to rehabilitation of workers sustaining compensable disabilities. Further, it became increasingly apparent that useful, constructive liaison in the foregoing connections among medicine, management, labor, Workmen's Compensation administrative agencies, and insurance carriers should be strengthened.

Since *most* jurisdictions limit employer liability, *fewer* jurisdictions define pre-existing conditions in their respective Workmen's Compensation laws, and *fewest* jurisdictions actually require pre-employment physical examinations, it was concluded that *realization of the most equitable employment climate possible is a progressive legislative process, requiring careful adjustment to local situations.* A substudy of enactment and amendment chronology of Workmen's Compensation laws in selected jurisdictions including Illinois, Missouri, Nevada, and Pennsylvania produced a striking pattern of similarity and seemed to substantiate the committee's assumption as to this significant finding.

Laws and administrative procedures in 40 state jurisdictions as regards Workmen's Compensation were reviewed and the final study report was in the form of suggested guides for the information of all concerned. The association's House of Delegates agreed with the committee that it could serve best in an advisory capacity. At the 91st Annual Session in 1959, the House of Delegates approved the final product of the study which is entitled "Guiding Principles for Medical Aspects of Workmen's Compensation." This document, since published, is available without charge to all desiring it.

In summarizing the "Guiding Principles," the principal purpose is to state basic policies of the association as regards Workmen's Compensation.

It is re-emphasized that the association believes that self-reliance, exercise of personal initiative, and the opportunity to pursue gainful employment are among those factors contributing to the dignity of free men. Where loss of physical capacity occurs in the course of employment, all concerned have an obligation to assist individuals so affected in making physical, economic, and social readjustment. Rehabilitative and restorative services should be placed uppermost to afford opportunity for regaining self-reliance and economic independence.

Unfortunately, many apparently think of Workmen's Compensation as a program of lump sum awards or weekly cash benefit payments to the occupationally disabled. Where cash indemnity is stressed in compensation cases based on job aggravation of pre-existing conditions, employers are reluctant to hire the handicapped. Creation and maintenance of an equitable employment climate ideally includes:

(1) Limiting employers' liability at a level consistent with additional compensation risks,

(2) Defining by law "pre-existing conditions," "accident," "injury," and "occupational disease," and

(3) Requiring medical determinations of such conditions prior to employment.

The association believes that the basic goals of Workmen's Compensation today are:

(1) Prompt rehabilitation of the occupationally disabled,

(2) Assured, prompt, and adequate indemnity for the occupationally disabled or survivors in cases where death occurs, and

(3) Accomplishment of these objectives at minimal cost to employers and society.

WHAT IS REHABILITATION?

The committee defines "rehabilitation" as including "health services based upon medical and surgical diagnosis, evaluation, and treatment which must be continued beyond acute care stages to the point where the patient enjoys maximum reduction of physical and mental impairment. Services to the disabled in rehabilitation include, but are not limited to, medical, dental, and necessary paramedical services, supplies, and supervision in treatment of injury and disease; vocational counseling; training or retraining where necessary; transitional employment; placement service; and an opportunity for the rehabilitee to secure again these or similar services necessary in the interest of the same rehabilitation process."

The objectives in rehabilitation are maximum possible elimination of health impairment through use of medical skills, restoration of human productivity as rapidly as possible, and attainment of economic and social self-reliance. Services to the

disabled in rehabilitation when unable to return to former employment are stated in the definition.

Procurement and coordination of these services in behalf of the rehabilitee according to his individual needs should be carried out as *promptly* and economically as may be compatible with objectives sought. Psychologically, the employee needs resumption of productivity at the earliest possible moment to avoid the onset of parasitism and neuroses. If it becomes apparent that the injured employee will not be able to return to his former occupation, planning for other placement, training, and related services should be projected and arranged as soon as this is recognized.

THE KEY WORDS

In the pursuit of rehabilitation objectives for the occupationally disabled, the association feels that the key words are "promptly" and "adequately." Joint application of these expressions obviously connotes maximum economy in effecting rehabilitation. It is apparent that restoration of the occupationally disabled to economic and social independence should be at all times the goal; otherwise, the effort becomes one of pension and general health care programs and not true Workmen's Compensation endeavor. The interest of physicians in Workmen's Compensation indemnity is limited to its relationship to and effect upon rehabilitation. They are interested in the return of the disabled individual to health and gainful occupation. Now, as regards this interest, physicians feel that compensation indemnity should:

(1) Be sufficient in amount and duration to prevent a serious reduction in previous living standards of the individual and his immediate family during recovery, or

(2) For obvious reasons, provide prompt assistance to survivors in cases where death occurs.

On the other hand, the association believes that compensation indemnity *should not:*

(1) Lessen in any manner the disabled's incentives for rehabilitation by being overly generous, or

(2) Lessen the employer's incentive for supporting rehabilitation by being fixed at an inadequate level, or

(3) Be utilized in any manner to circumvent, delay, or lessen necessary rehabilitative processes, or

(4) Produce excessive or burdensome costs which do not contribute to rehabilitation. This consideration is due employers in the discharge of their responsibilities to occupationally disabled workers.

Mississippi physicians feel strongly about these aspects of the state's Workmen's Compensation program which they believe was not designed to recover damages for injury and illness, but to effect rehabilitation and restoration of self-reliance. *It should be recognized by all concerned that business pursuit in a free economy involves a shared risk.* Mutual acceptance of responsibility and full understanding are essential in assuring economic opportunity and the rights of all.

Probably no one denies that compensation indemnity is an indispensable facet of Workmen's Compensation. If the premise upon which these applications of compensation indemnity have been evaluated is sound, then it is simply being stated that indemnity is an interim measure designed solely to assist in realizing program objectives of rehabilitation.

As such, indemnity should be seen as a means and not an end.

Overutilization or undue parsimony as regards compensation indemnity may exert adverse effects upon rehabilitation objectives as well as employer, insurance carrier, and administrative agency alike.

PHYSICIAN RESPONSIBILITIES

Physicians recognize and accept certain responsibilities for service in Workmen's Compensation programs. Among these are reporting medical findings and treatment in cases of occupational injury and illness with promptness, conciseness, and *objectivity;* the furnishing of testimony on reasonable notice as to scientific medical findings to the end that every deserving claim receives just consideration; and with all patients, the primary purpose of rendering care with a full measure of devotion, diligence, and professional skill, following through complete rehabilitation to maximum productivity.

MSMA RESPONSIBILITIES

As regards responsibilities of the Mississippi State Medical Association, physicians feel that the organization must cooperate with all concerned in administration of applicable laws, keeping the best interests of patients and program goals uppermost. The association must maintain knowledgable, accessible, organizational mechanisms to advise with employer, employee, insurance and administrative groups on medical aspects of Workmen's Compensation programs and to advance recommendations for constructive legislative evolution of sound laws. Here, it should be empha-

sized again that this role is one of advising and making recommendations.

The association must also offer means to prevent and resolve misunderstandings as to medical services and to investigate, mediate, and arbitrate grievances against physicians. In this connection, the association wishes it known that each local or county medical society as well as the state association maintains a grievance committee. The state association committee has authority to compel a response either in writing or by personal appearance from any member of the association, to initiate investigations on its own motion, and to file charges in the name of the committee against a physician before the Judicial Council of the association. A grievance committee exercises no disciplinary functions, its authority being limited to receiving complaints, conducting investigations, hearings, mediation, arbitration, and, where necessary, referral of matters to appropriate bodies for adjudication or discipline.

Mississippi physicians feel that their association should be identified with program objectives in a role of service rather than with private or economic interests of parties involved in compensation situations. Through study and promotion among its members, the association tries to assist in preparing adequate and feasible medical guides for employee job capabilities in respect to pre-employment and postdisability evaluations. This is done to aid in obtaining optimal job placement.

Moreover, physicians are encouraged in promotion of preventive and safety programs in plants.

PHYSICIAN RIGHTS

If physicians are to discharge these substantial obligations which they have recognized and assumed, then it is only reasonable that the profession, in turn, should expect recognition of responsibilities by other parties in the compensation situation. The right of a physician to place a fair valuation upon his professional services in determining fees should be respected. In the absence of stated agreements between physicians rendering service and legally responsible third parties, it is felt that compensation service fees should approximate those which would have been charged the disabled employee for similar services as a private patient. Since doctors of medicine recognize and accept their responsibility for investigating and acting in instances of misunderstandings and grievances, they feel that schedules of maximum fees for care of the occupationally disabled are inappropriate and undesirable.

Often, it is necessary for physicians to supply medical testimony at hearings and trials. In such cases, physicians are entitled to remuneration for time spent in furnishing medical testimony and for preparing special reports relating to the occupationally disabled.

In recent years, much has been said about free choice of physician and hospital. It has been argued that this privilege exerts influence upon the quality and quantity of medical care and Mississippi physicians believe that free choice is among those factors contributing to the best possible medical care. Specifically, they feel that free choice should not be restricted on purely economic grounds, the unconvincing argument that the patient is unable to choose intelligently because of his inability to appraise professional competence, or the questionable premise that responsibility for health maintenance belongs other than to the individual.

Nonmedical agencies having an interest in Workmen's Compensation should not appraise a physician's competence but rather should leave this to his peers. Again, the association gives its assurances that such agencies will receive prompt cooperation from it in situations where professional competence is an issue. Undue restriction on free choice of physician under Workmen's Compensation programs is not desirable.

Although the experience of the practicing profession with employer, employee, insurance carriers, and administrative agencies is largely satisfactory in all respects, it nevertheless seems appropriate to urge continued respect for the physician-patient relationship. Interposition of any extraneous influences in that relationship interferes with the return of the patient to his maximum recovery in minimum time. The doctor should be required to furnish a minimum of medical reports and special information consistent with efficient adjudication of compensation claims. Excessive paper work consumes the one measurable commodity a physician has with which to earn his livelihood, his time. Where the administrative agency or insurance carrier phrases requests for information with conciseness and clarity, making possible brief, objective responses, the physician's cooperation is easily obtained. The committee feels that Mississippi physicians generally have been responsive to requests for information.

REHABILITATION COUNCIL

With the approval and publication of the "Guiding Principles," the committee became more aware than ever that its tasks were still incomplete. A new study among private and pub-

lic agencies concerned with rehabilitation of the occupationally disabled and diseased was initiated. During the year and a half that this study was conducted, the group worked with 12 such agencies. The principal conclusion was that a means of achieving more effective lateral communication among the several agencies was urgently needed. Toward this end, the committee recommended that the association endorse the concept of a rehabilitation council which would be a quasi-official body made up of representatives from the several organizations and areas of interest. Specifically, it was proposed that it be a loosely knit, nonadministrative, nonlegislative body, the goal of which would be to furnish a forum for discussion of ideas and exchange of information. In this way, it was felt that coordination in the rehabilitation of the occupationally disabled might be greatly assisted.

The association approved the proposal which was conveyed to the governor for his consideration. Early in 1962, Governor Ross R. Barnett appointed such a council, naming representatives from the hospital, public welfare, Workmen's Compensation administration, employment, vocational rehabilitation, employer, insurance, labor, veterans, and medical fields. During five meetings of the council in 1962, the group concluded that there was need for better communication of case findings of injured workers in need of rehabilitative services from both physicians and Workmen's Compensation sources, where the latter sponsors and directs such services. The council felt that this need extends from the period of care for the acute condition to and through communication of case findings, evaluation, treatment, training, supervised work, counseling, and final placement. An interest in specialized facilities dedicated to rehabilitation was voiced, but the primary concern was for maximal utilization of those facilities now in existence, particularly general medical and surgical hospitals. While care of acute phases of occupational injuries and diseases was deemed adequate, it was also recognized that this is only the beginning of the total rehabilitative process.

The council expressed the belief that there is a need for evaluation of the rehabilitee who must change occupations by those individuals particularly trained and skilled in social work. Such evaluation would contribute substantially to total appraisal of the individual's rehabilitation problem and to the necessary tasks of following the rehabilitee in his new work endeavor to assure final success in the overall process. The council reiterated that the principal objective of a Workmen's Compensation program should be rehabilitation of the occupationally disabled and that a climate should be created in which the injured or ill worker will have the incentive to seek regained self-sufficiency.

During the six years of these studies and work, the Mississippi Economic Council, representing business, civic, and industrial leadership, conducted separate but parallel studies in the Workmen's Compensation area. The association was gratified to observe MEC's adoption of a policy stating that rehabilitation should be the goal of Workmen's Compensation and the interest of this organization in drafting an occupational illness and disease law, presumably for presentation before the 1964 Regular Session of the Legislature.

SUMMARY

None should be so casual as to accept the flimsy notion that the whole of Workmen's Compensation and rehabilitation of the occupationally disabled can be neatly packaged and placed on the shelf as an ultimate requiring no more study, research, or action. Those in public administration readily recognize that an area is involved where the only changeless thing is change.

We are dealing with a quantity which is sensitive to socioeconomic, technological, actuarial, scientific, and social influences. What represented our best combined efforts yesterday can well be today's obsolescence. We are challenged to get on with the business of making a producer from a disabled consumer. The problems which we encounter and the differences among all concerned in this program as to methodology are really sources of strength. ★★★

514-D East Woodrow Wilson Drive

DISCIPLINE DETAIL

Asked by the anxious mother if she should spank her young problem son, the child psychiatrist advised, "Yes, but only if you have a definite end in view."

Proceedings of the House of Delegates

95th Annual Session
May 13-16, 1963
Biloxi, Mississippi

THE 60TH ANNUAL SESSION of the House of Delegates was convened during the 95th Annual Session of the Mississippi State Medical Association, in pursuance to lawful notice given, on May 13, 1963, in the Fountain Terrace Room of the Hotel Buena Vista, at Biloxi, Mississippi, at 1:30 o'clock in the afternoon, by Dr. John G. Archer, the President-elect, in the absence of Dr. C. P. Crenshaw, the President, who was ill. The invocation was spoken by Dr. John W. Moore, Pastor of the Biloxi Methodist Church.

After extending greetings and making prefacing remarks explaining the absence of the President for reason of personal illness, Dr. Archer presented the Vice Speaker of the House of Delegates, Dr. Howard A. Nelson, Greenwood, and the Speaker, Dr. B. B. O'Mara, Biloxi, who assumed the chair. Dr. C. G. Sutherland, Chairman of the Reference Committee on Credentials, reported the presence of a quorum of registered and seated delegates in accordance with Section 3, Chapter V, By-Laws of the association.

APPOINTMENT OF TELLERS AND SERGEANTS-AT-ARMS

Jack A. Stokes, Pontotoc
George E. Gillespie, Jackson
Victor E. Landry, Lucedale

ANNOUNCEMENT OF REFERENCE COMMITTEES

Reports of Officers and Board of Trustees
- M. Q. Ewing, Amory, Chairman
- Guy T. Vise, Meridian
- W. J. Weatherford, Pascagoula
- Joseph G. McKinnon, Hattiesburg
- S. Lamar Bailey, Kosciusko

Medical Practices
- Stanley A. Hill, Corinth, Chairman
- George F. Archer, Greenville
- Robert E. Shands, New Albany
- Leo J. Scanlon, Natchez
- Paul B. Brumby, Lexington

Miscellaneous Business
- Lawrence W. Long, Jackson, Chairman
- W. W. Walley, Waynesboro
- Jo N. Robinson, Columbus

Credentials
- C. G. Sutherland, Jackson, Chairman
- J. A. K. Birchett, Vicksburg
- Malcom D. Baxter, Hernando

Rules and Order of Business
- A. V. Beacham, Magnolia, Chairman
- O. G. Eubanks, Crystal Springs
- W. T. Wilkins, Clarksdale

REPORT OF THE REFERENCE COMMITTEE ON RULES AND ORDER OF BUSINESS

To assist the Speaker and Vice Speaker in the orderly conduct of the proceedings of this House of Delegates, your Reference Committee on Rules and Order of Business makes the following recommendations:

Conduct of Business. The business of the House should be conducted according to *Robert's Rules of Order, Revised* and the Speaker and Vice Speaker should prescribe the order of business as set out in the By-Laws. To insure proper recording of the transactions, all delegates recognized should identify themselves. Except for distinguished visitors and those having official capacity in the association, unanimous consent should be obtained for extending the privilege of the floor to non-members of the House of Delegates. The report of the Reference Committee on Credentials should constitute the formal roll call.

Reports. All reports and resolutions presented should be referred to the appropriate reference committee by the chair immediately after their presentation, the only exception being those which are of such a nature as to require no further consideration and are, therefore, ready for decision by vote of this House. Reports should be iden-

tified by title and number and read clearly. Debate should be reserved until such time as the reference committees conduct formal hearings and when they report to this House.

Resolutions. To avoid burdensome tasks upon the reference committees and to insure that all interested members have adequate opportunity to discuss their views, the House should permit no introductions of resolutions after the present meeting except for (1) matters of an emergency nature, the validity of such emergency to be determined by majority vote, (2) matters relating to a scientific section or scientific work, and (3) proposed amendments to the Constitution and/or By-Laws which must lie on the table for one year.

The report of the reference committee was adopted.

ADOPTION OF TRANSACTIONS

On motion by Dr. C. W. Patterson, Rosedale, second by Dr. J. P. Culpepper, Jr., Hattiesburg, the Transactions of the 59th Annual Session of the House of Delegates, 94th Annual Session of the association, Jackson, May 7-10, 1962, published in Volume III, Number 8, JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION, August 1962, were adopted.

REMARKS OF THE SPEAKER

Dr. B. B. O'Mara: Your Speaker and Vice Speaker extend to each member of this House of Delegates a cordial and fraternal welcome. We know that you share our desire to make this 95th Annual Session the best in our 107 years of history.

For four days, the spotlight of public scrutiny will be upon this annual session. New and exciting scientific presentations will catch the interest and imagination of the public. There will be sidelights and human interest aspects, too. But what we say and what we do in this House of Delegates will affect in some degree the lives and health of more than two million Mississippians.

This policy-making body of our association has great responsibilities. It is an honor and a distinction to serve as a member of it. But it is also a challenge to serve our profession and our fellow man. In every respect, we shall fulfill these responsibilities and we shall meet this challenge with resolution, with dignity, and with capability.

No member really need be reminded that we are a busy deliberative body. As we consider the business before us, there will be differences of viewpoint and opinion. This is as it should be, and through these differences, we will find answers and solutions. In presiding over your deliberations, your Speaker and Vice Speaker hope that you will seek the simple, understandable parliamentary procedure. It will be our purpose to assure the rights of the minority while proclaiming the will of the majority. At all times, a sincere endeavor will be made to accord each member equal, impartial—but always fair and respectful—treatment.

The chair will ask that reports to the House of Delegates be read by the officer or chairman responsible for their presentation. These reports represent countless hundreds of hours of meetings, research, and hard work by those who carry the association's leadership responsibilities. They have been carefully written to include the lean without the fat. Each is clearly entitled to careful consideration. As each is referred to a reference committee, make a note as to your individual interest. Plan to attend the reference committee hearings and make your views known in constructive discussion. At the adjourned meeting of this House, we will make known our decisions on this work and on the stewardship accounting about to be made. We will chart the course of our association for another year.

Let us now be about medicine's business, a task to which we are honored to be called.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your Reference Committee feels that many members do not appreciate the enormous constructive work performed by our Speaker and Vice Speaker. In endorsing the remarks of the speaker, we add our commendation of Dr. O'Mara and Dr. Nelson.

The report of the reference committee was adopted.

REPORT OF THE COUNCIL ON CONSTITUTION AND BY-LAWS

Dr. E. LeRoy Wilkins: Background. At the 94th Annual Session in 1962, the following proposed amendments to the Constitution and By-Laws of the association were introduced at the adjourned meeting of the House of Delegates to lie on the table for one year with the recommendation that the proposals be discussed by each component medical society and be acted upon at the 95th Annual Session in 1963:

(a) *Constitution.* Amend Section 1, Article VI, to read: "The general officers of the association shall be a President, President-elect, three Vice Presidents, one from each Supreme Court Dis-

trict, Secretary-Treasurer, Speaker, and Vice Speaker."

(b) *Constitution.* Amend Section 2, Article VI, to read: "The President, President-elect, and Vice Presidents shall hold terms of one year. The Secretary-Treasurer, Speaker, and Vice Speaker shall be elected for terms of three years."

(c) *By-Laws.* Amend Chapter IX to delete Section 8, Editorial Council, altogether.

(d) *By-Laws.* Amend Chapter X to delete Section 4, Committee on Publications, substituting therefor: "Section 4. Committee on Publications. The Committee on Publications shall consist of the Editor and two of the Associate Editors, all appointed by the Board of Trustees for terms of one year each. The chairman of this committee shall be designated by the Board. The committee shall implement instructions and policies of the Board of Trustees relating to the JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION. Additionally, the committee shall study and recommend to the Board policy proposals relating to organization and production of the JOURNAL, reporting annually its deliberations."

Notices of Pending Amendments to the Membership. The full text of the proposed amendments was published in J.M.S.M.A. III:383 (Aug.) 1962. In accordance with Article XII of the Constitution, the proposed amendments were sent officially to each component medical society on February 19, 1963, or more than two months prior to the annual session at which final action is to be taken.

Discussion and Final Action. It is recommended by your council that all interested delegates appear before the council to discuss their views with respect to the pending amendments at the scheduled and announced hearing as published in the official program.

REPORT OF THE COUNCIL ON CONSTITUTION AND BY-LAWS

Your Council on Constitution and By-Laws, serving as a reference committee, conducted open hearings on the report which was concerned with proposed amendments to the Constitution and By-Laws relating to the organization of the Committee on Publications. Six physicians appeared before your reference committee and all spoke in opposition to the proposed amendments.

Your Council feels it appropriate to express its appreciation to the Editor, the two Associate Editors, and the three members of the present committee which are appointed by the Board of Trustees for their diligent and fruitful work in connection with our JOURNAL.

Your Council recommends that the proposed amendments be not adopted.

The report of the council, acting as a reference committee, was adopted.

REPORT OF THE BOARD OF TRUSTEES

Dr. H. H. McClanahan, Jr.: Organization and Duties. The Board of Trustees is the executive and governing body of the association during vacation of the House of Delegates. It is responsible for management and policy direction of all phases of association activity. In the discharge of these duties and responsibilities, formal meetings of the Board were conducted in May, August, and November of 1962 and in April and May of 1963. No member was absent from any of these meetings. This annual report relates to management, policy functions, and Board-supervised programs deemed important to the membership and this House of Delegates.

Referrals from the House of Delegates. Three matters were referred to the Board by this House at the 94th Annual Session for either study or investigation. One additional matter originated at the same annual session and the Board deems it sufficiently important to require consideration at the present meeting. Another matter originated during the year. These referrals and the additional matters are:

(a) *Internship as a Prerequisite to Medical Licensure.* This referral consists of Resolution No. 7, 94th Annual Session, and is the subject of a separate supplemental report.

(b) *Teaching Programs in Charity Hospitals.* This referral relates to a report submitted by the Council on Medical Service and it will be the subject of two separate supplemental reports, one from the Board and one from the council.

(c) *Policy of Non-Participation.* This referral related to Resolution No. 8, 94th Annual Session, and is the subject of a separate supplemental report.

(d) *Interprofessional Code.* A proposal for development of an interprofessional code for Mississippi physicians and attorneys is the subject of a supplemental report.

(e) *Assistants at Surgery.* This matter, discussed by this House at the 94th Annual Session, has been the subject of study by the Board. In the light of further developments at national level, a supplemental report in this connection will be submitted.

Committees of the Board of Trustees. At the present reporting, the Board has three constitutional and four *ad hoc* committees. Four councils

are responsible to the Board for reporting purposes.

(a) *Advisory Committee to the Medical Auxiliary.* This constitutional body continues to function as the association's official advisory and liaison mechanism with Auxiliary officers and groups.

(b) *Grievance Committee.* This nine member constitutional body, functioning for the most part in an appellate capacity, supervised the processing of seven cases during the 1962-63 association year, all of which have been resolved at the local level in accordance with stated policy.

(c) *Committee on Publications.* This six member constitutional committee consists of the Editor, the two Associate Editors, and three others appointed for terms of three years each by the Board. In supervising production and publication of the association's JOURNAL, this group has been active in the performance of valuable service. Your JOURNAL is in its fourth year of publication. Three specific improvements in contents quality have been noted during the past association year:

(1) *Special Issue.* The September 1962 issue was devoted to space medicine, attracting favorable comment nationally.

(2) *New Scientific Feature.* The monthly radiologic seminar, a project of the Mississippi Radiological Society, was added as a recurring scientific feature. It has been warmly received by the membership.

(3) *Literature Reviews.* The frequency and quality of literature reviews by association members have been increased to the extent that most new major medical books are now being reviewed.

Volume III (1962) compares favorably in size with that of 1961. It consisted of 636 editorial pages and 598 advertising pages, a decrease of only 1 per cent from the preceding year. Advertising income for the 34 state medical journals which are federated and nationally recognized decreased 9.3 per cent in 1962 over 1961 but your JOURNAL MSMA experienced only a 2 per cent decrease. Even so, gross national advertising revenue has declined about $1,400 per month since 1960, a direct result of the Kefauver drug hearings and more stringent Food and Drug Administration regulations. Your JOURNAL, however, remains solvent and self-sustaining, whereas some other state medical journals have experienced substantial losses.

During 1962-63, the Committee on Publications conducted an extensive readership and effectiveness study of your JOURNAL among members of the association. It was discovered objectively that seven out of 10 members are regular readers, three out of 10 read the JOURNAL sometimes, but only one out of 100 reported never reading the JOURNAL. Ninety-seven out of 100 Mississippi physicians found the JOURNAL'S advertising at least "good and ordinarily useful." Opinion was 99-to-1 that the major scientific articles were good and the recurring feature departments received favorable endorsements as high as 96 per cent.

The Board commends the Committee on Publications and thanks our authors and readers for the success of our JOURNAL. It is emphasized that it is a team effort and the association's largest and most complex single program.

(d) *State Medicare Review Board.* This *ad hoc* committee has statutorily prescribed duties with respect to administration of professional care aspects of the Dependents' Medical Care Act for which the association is contractor and fiscal agent in Mississippi. During 1962-63, the group met on about 20 occasions. The program increased 56 per cent during the past year and more than 6,700 claims from physicians were received. Payability of these claims increased from 93 to 95 per cent and participation by Mississippi physicians in the Medicare program was at the all time high of 60 per cent. The Board of Trustees commends the review board which serves without compensation.

(e) *Robins Award Board of Judges.* The second annual MSMA-Robins Award to a Mississippi physician for outstanding community service will be presented during the present annual session. The judges for this award were the three vice presidents.

(f) *MSMA-Mississippi Hospital Association Liaison Committee.* This *ad hoc* body consists of the president, president-elect, and chairman of the Council on Medical Service who represent the association. The group reports to the Board but its activities are also discussed by the council represented. Many areas of common interest to the two associations have been explored. The Board of Trustees has approved the committee's drafting a guide for relations between the two associations.

Legislative Activities. The Council on Legislation is responsible to the Board of Trustees and is charged with analyzing proposed legislation, recommending legislative positions to be assumed, and for securing laws in the interests of public health, scientific medicine, and medical practice.

(a) *Expansion of the Council.* At the 93rd Annual Session, 1961, the House authorized expansion of this council from three to nine members. To complete the expansion and bring all

terms of service into three groups with successive years of expiration, it will be necessary to elect a member from District 5 for one year only at the present annual session. This proposal was approved by the House in 1962.

(b) *State Legislation.* At the time of the 94th Annual Session, the 1962 regular session of the State Legislature was still meeting. A complete reporting of medical legislative activity to the House at that time was, therefore, not possible. The regular session convened January 2, 1962, and adjourned *sine die* on June 2, 1962, the longest regular session since 1870. A total of 1,875 public and private bills were introduced of which 862 were enacted and, except for 10 vetoed, became law. Of 176 concurrent resolutions, 109 were in the House and 67 were in the Senate.

(1) *Health and Medical Legislation.* A total of 77 measures related to matters of medical interest. Of these, 34 were passed:

House introductions	49
Enacted	23
Failed	26
Senate introductions	28
Enacted	11
Failed	17

(2) *Association Summary.* The association actively supported four House introductions which were all enacted: the "Good Samaritan" law, two measures for implementing OAA aspects of Kerr-Mills, and provision for inspection of narcotic prescription records. Two House measures were opposed and both were defeated: licensure of chiropractors and a proposal to alter professional qualification for some nurses. Initially, MSMA supported a measure to license physical therapists and another for control of ionizing radiation but support was withdrawn when committee substitutes were reported; neither measure passed.

(3) *Special Sessions.* Three special sessions of the legislature were conducted in 1962. At the December and final session, the association's Medical Assistance Act, proposing full implementation of the Kerr-Mills program, was presented with the sanction of the Governor. Because of time limitation, the measure was not considered. It was, however, well received by the Senate Committee on Pensions to which it was referred. This measure is considered by the Board of Trustees as the association's number one state legislative objective.

(c) *National Legislation.* At the last reporting of legislative activities, to the House of Delegates, the 2nd Session of the 87th Congress was still in session. At adjournment on October 13, 1962, it stood as the longest session in 11 years. The third bill for compulsory federal medical care of the aged under Social Security, H.R. 4222, the King-Anderson proposal, was defeated 52-to-48 in the Senate. Major enactments of medical interest included the substitute drug control bills, a series of liberalized tax deduction measures with respect to medical expense, and the Keogh bill.

(1) *The 88th Congress.* On January 9, 1963, the 88th Congress was convened. The party divisions assure liberal control and the new King-Anderson bills, H.R. 3920 in the House and S. 880 in the Senate, were introduced on February 21, 1963. The association's position of unalterable opposition to these measures has been expressed.

(2) *Federal Aid to Medical Education.* On February 13, 1963, at Washington, our president, Dr. C. P. Crenshaw, presented testimony in behalf of the association opposing H.R. 12, federal aid to medical school construction, federal student loans and teaching grants, and federal funds for research facilities construction.

Keogh Program. At the 92nd Annual Session in 1960, this House of Delegates approved a program for organization of an association-sponsored voluntary retirement plan for members to be administered by the Deposit Guaranty Bank of Jackson. Following enactment of the measure, the plan was made operational and the membership has been fully informed of its availability.

Association Insurance Program. The three insurance programs of the association include (1) first dollar hospitalization coverage through the Mississippi Hospital and Medical Service, (2) a variety of income replacement, hospitalization, and group life plans through the Continental Casualty Company, administered by Thomas Yates Company of Jackson, and (3) a professional liability insurance program offered through the St. Paul Companies.

(a) *St. Paul Program.* At the 93rd Annual Session in 1961, the House of Delegates authorized initiation of an association professional liability program with the St. Paul Companies. On November 1, 1961, a premium rate reduction of 20 per cent was made. This reduction was reported to the House in 1962. A further reduction was effected March 15, 1963, in the St. Paul program, although some carriers operating in Mississippi actually increased some rates. For purposes of professional liability insurance, physicians are

now divided into four categories by types of practice:

(1) *Class I:* General practitioners and certain specialists who do no surgery.

(2) *Class II:* General practitioners and certain specialists who perform minor surgery.

(3) *Class III:* General practitioners who perform major surgery and certain specialists.

(4) *Class IV:* Certain surgical specialists and certain other specialists.

(b) *Premium Rates.* The St. Paul program offers the following rates in these connections, all quoted with respect to the basic 5/15 coverage:

(1) *Class I:* $29

(2) *Class II:* $39

(3) *Class III:* $74

(4) *Class IV:* $99

Generally, this new rate revision results in further savings for members of the association who choose this carrier. Since inception of the program, the premium rates for those doing no surgery have been decreased 48 per cent at a dollar savings of $56 annually for coverage of 100/300. For those doing all surgery, the decrease is 26 per cent at a dollar savings of $72. During 1963, professional liability insurance rates have been increased in 15 states from 6.2 per cent in California to as much as 25 per cent in six states. Three states have enjoyed premium reductions in 1963: Mississippi, about 15 per cent; and Missouri and Wisconsin, about 10 per cent each. Thus, under the present program, Mississippi leads the nation in lowering the cost of this essential coverage.

Membership of the Board. During the past association year, two new members were welcomed to the Board, Drs. Riddell and Moak, although Dr. Riddell had served a previous term during 1956-59. Officers of the Board have been: Drs. H. H. McClanahan, Jr., chairman; John B. Howell, Jr., vice chairman; and C. D. Taylor, Jr., Secretary.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Every member of this House of Delegates recognizes that the Board of Trustees undertakes and accomplishes an enormous amount of work in behalf of our association. Your Reference Committee understands informally that during six meetings of the present association year, the Board worked with approximately 2,000 pages of agenda, appendices, minutes, and source material. In their principal annual report and supplemental reports, the Board has effectively condensed the highlights of this work.

Annual Report. Your Reference Committee appreciates the annual report of the Board and recommends its approval. We especially recommend that the liaison mechanism between the Mississippi State Medical Association and the Mississippi Hospital Association be strengthened and we urge that the Committee on Legislative Liaison, which consists of at least one physician in each county, be fully reactivated and utilized during the current association year.

The report of the reference committee was amended on motion by Dr. William E. Lotterhos, second by Dr. J. P. Culpepper, Jr., Hattiesburg, to include "Operation Hometown," an AMA information program, in the legislative activities of the association. As amended, the report was adopted.

SUPPLEMENTAL REPORT "A" OF THE BOARD OF TRUSTEES

Dr. H. H. McClanahan, Jr.: Teaching Programs in Charity Hospitals. At the 94th Annual Session, Jackson, 1962, the Council on Medical Service submitted Supplemental Report No. 8-C, subject: "Teaching Programs in Charity Hospitals." In this report, the council described the four institutions under the supervision of the Board of Trustees of State Eleemosynary Institutions and recommended that "the University of Mississippi School of Medicine avail itself of the opportunity for teaching in these four institutions and establish residency programs in each." The House of Delegates voted to revise the recommendation to read that "The Council on Medical Service recommends that the University of Mississippi School of Medicine investigate the feasibility for teaching in these four institutions" and as changed, approved the report.

Views of the University. The Board of Trustees referred the report and proposal to the University of Mississippi School of Medicine and received the following expression from the dean summarizing a discussion in this connection by the clinical chiefs:

"Several of the services have previously considered the possibility of utilizing the opportunities available in the charity institutions for teaching. For various reasons, this has not been feasible in the past. No individual service feels at present that it could undertake the responsibility of establishing a residency or other teaching program at present because:

"(1) The residency programs are still being improved and stabilized at the Medical Center.

It should be remembered that students who graduated in our first class in 1957 have not yet completed any of the residency programs if they had military commitments. Otherwise, the first ones to complete a three-year residency will do so this July (1962).

"(2) The increased call-up of physicians by the armed services has decreased the number of residents available to all clinical services.

"(3) The supervision necessary to insure a good residency program is difficult to achieve. We still have not been able to initiate residency programs in all areas at the adjacent Veterans Administration Hospital.

"(4) It is difficult to persuade residents and their families to leave the parent institution for a period of service elsewhere.

"(5) So far as is known, funds are not available for the additional costs of such programs."

Views of the Board. The Board of Trustees expresses understanding of the school's position in this respect and appreciates the difficulties and complexities of teaching programs. Nevertheless, the Board feels that further exploration in this area is indicated and suggests that the Council on Medical Service make a survey as to the availability of willing and qualified physicians in the localities of these hospitals to supervise and instruct in such a program.

SUPPLEMENTAL REPORT "B" OF THE COUNCIL ON MEDICAL SERVICE

Dr. Guy T. Vise: Teaching Programs in Charity Hospitals. At the 94th Annual Session in 1962, the Council on Medical Service submitted to the House of Delegates Supplemental Report C, subject: "Teaching Programs in Charity Hospitals," in which it was recommended that "the University of Mississippi School of Medicine avail itself of the opportunity for teaching in these four institutions (the four charity hospitals located at Laurel, Meridian, Natchez, and Vicksburg) and establish residency programs in each." The House amended the report to read that the "Council on Medical Service recommends that the University of Mississippi School of Medicine investigate the feasibility for teaching in the four institutions." As changed, the report was adopted and subsequently referred to the University through the Board of Trustees.

Views of the Council. Your council has conducted further discussions in this connection and reaffirms its belief that the initial recommendation should be approved and implemented. In this connection, it is pointed out:

(a) *Teaching Beds.* Use of the four charity hospitals would more than double the number of teaching beds now available at the University Hospital. These institutions have a combined total of 420 beds, including 100 especially constructed for chronic care at Vicksburg.

(b) *Clinical Material.* Patients admitted to these hospitals represent all age groups and disease and injury conditions. Since average occupancy is about 400, it is believed that this represents a rare teaching opportunity.

(c) *Experience in Other Areas.* In Louisiana, extensive use is made of state charity hospitals for teaching purposes. This is successfully utilized by the two medical schools and at least one major non-university teaching hospital.

(d) *Need.* Your council points out the need for expanding residency programs, examples being in the disciplines of ophthalmology and otolaryngology. Other such opportunities exist. With addition of 420 beds for general surgery and medicine, perhaps more beds can be allotted at the Medical Center for training in other branches of surgery.

(e) *Additional Faculty.* The council, recognizing the desirability of augmenting the clinical faculty to assure adequate supervision of residents, suggests that there are those physicians located in cities having charity hospitals who are qualified to instruct, i.e., board certified or board eligible, and who would be willing to do so.

Proposed Implementation. The council believes that a sound plan for this additional program should be developed. Moreover, only those residents in their third and succeeding years of training should be permitted to go into the charity hospitals. In connection with the former, the council proposes to establish an *ad hoc* committee whose duties it will be to make further studies and to amass data on the proposal. In the light of these additional recommendations and the restatement of opportunities, adoption of the program is earnestly recommended.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your Reference Committee considered simultaneously the reports of the Board of Trustees and the Council on Medical Service in connection with teaching programs in charity hospitals. We approve the recommendations made and support the arguments advanced in these reports. We feel that the Council on Legislation should conduct adequate studies in these several connections while the Council on Medical Service conducts the survey recommended.

The report of the reference committee was amended on motion by Dr. H. H. McClanahan, Jr., Columbus, second by Dr. George E. Twente, Jackson, to require that the Council on Medical Education be a party to the studies recommended. As amended, the report was adopted.

SUPPLEMENTAL REPORT "B" OF THE BOARD OF TRUSTEES

Dr. H. H. McClanahan, Jr.: Internship as a Prerequisite to Medical Licensure. At the 94th Annual Session, Jackson, 1962, Dr. Howard A. Nelson, Greenwood, introduced Resolution No. 7, subject: "Internship as a Prerequisite to Medical Licensure," in behalf of the Delta Medical Society. The resolving clause is quoted:

"Resolved, That the Mississippi State Medical Association advocate a change in the provisions for licensure to practice medicine in the state of Mississippi whereby a period of approved internship of at least one year's duration be made a requirement for future licensing."

The House of Delegates directed that "this resolution be referred to the Mississippi State Board of Health for study and investigation with the request that the Board of Health report to the association through the Board of Trustees." This referral was made on May 17, 1962.

Additional Information. The Board of Trustees offers the following information to assist in consideration of this proposal:

(a) *Legal Requirements.* In 1961, 37 of the 55 state and territorial medical licensure jurisdictions (50 states, District of Columbia, Canal Zone, Guam, Puerto Rico, and the Virgin Islands) of the United States required one year of internship as a prerequisite to medical licensure.

(b) *Educational Requirements.* Only one of the 87 approved medical schools requires internship as a prerequisite to graduation and the awarding of the M.D. degree. The Duke University School of Medicine specifies the internship requirement but does not withhold the degree until the internship is completed. Rather, the school obtains from each graduate a signed agreement that he will devote two years to such training before entering practice.

View of the State Board of Health. The Mississippi State Board of Health is concerned over limitations in the present law with respect to revocation of medical licensure. The Board of Health has further stated that "under the present law, internship is not mentioned as a prerequisite to medical licensure" and the belief was expressed that "this is going to have to be put into law rather than by regulation if internship is to be a prerequisite to licensure."

Recommendation of the Board. The Board of Trustees concurs in the objective sought in Resolution No. 7 and recommends its adoption. It is further recommended that appropriate amendments to present law be sought to require that internship be a prerequisite to medical licensure.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

The Board of Trustees conducted studies with respect to the desirability of requiring all candidates for medical licensure to have completed their intern training, as proposed in Resolution No. 7 introduced at the 94th Annual Session. We concur in the recommendation of the Board and we recognize that legislative action is necessary to bring about this change. We ask that the Council on Legislation make necessary studies in this connection for the purpose of proposing a suitable amendment to the Medical Practice Act.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT "C" OF THE BOARD OF TRUSTEES

Dr. H. H. McClanahan, Jr.: Assistants at Surgery. At the 94th Annual Session in 1962, the House of Delegates discussed a policy pronouncement of the American Medical Association with respect to assistants at surgery. One of the five points in the AMA policy provided permission "for a surgeon to employ other physicians to assist him in the performance of a surgical procedure and to pay a reasonable amount for such assistance." In this specific connection, the MSMA reference committee stated:

> "Your reference committee emphasizes that the policy of the association requires submission of separate statements by each physician participating in the care of a patient for services actually performed. Simultaneously, we reaffirm our opposition to the division of fees under any guise whatsoever."

Modification of AMA Policy. At the November 1962 Los Angeles clinical session, the AMA House of Delegates modified its position on this point by adding the qualification, "provided the nature of the financial arrangement is made known to the patient." This modification seems to reduce the difference between AMA and

MSMA policy from one of ethics to one of procedure. It should be appreciated that no change has been made in the Principles of Medical Ethics during consideration of this entire question.

MSMA Position. The Board of Trustees, in supporting MSMA's historic and traditional position against division of fees and in an effort to restate that position with reference to the present question, recommends adoption of the following policy statement:

> In the observance of the Principles of Medical Ethics to which each member of the Mississippi State Medical Association is committed, physicians are entitled to compensation commensurate with the value of services personally rendered. When a physician employs another to assist him at surgery, paying such assistant a fee therefor, the nature of such an arrangement must be made known to the patient. The division of professional fees among physicians, under any guise or circumstances whatsoever, is unethical.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your Reference Committee concurs in the rationale of the Board of Trustees in the matter of assistants at surgery. In this connection, your Reference Committee points out the policy statement which the Board recommends that this House of Delegates adopt (amended version):

> "In the observance of the *Principles of Medical Ethics,* to which each member of the Mississippi State Medical Association is committed, physicians are entitled to compensation commensurate with the value of services personally rendered. When a physician employs another to assist him at surgery, paying such assistant a fee therefor, the nature of such an arrangement must be made known to the patient. The division of professional fees between or among physicians, under any guise or circumstances whatsoever, without the knowledge of the patient, is unethical."

Dr. A. M. McBryde, Sumrall, moved that the words, "or circumstances whatsoever," be stricken from the report of the reference committee, second by Dr. Hugh B. Barnes, Petal. Dr. M. Q. Ewing, Amory, the reference committee chairman, amended the motion to alter the policy statement only by adding the words, "without the knowledge of the patient," following the word, "whatsoever," in the report. Dr. McBryde withdrew his motion and Dr. Barnes, his second, and the report, as amended by Dr. Ewing, was adopted.

SUPPLEMENTAL REPORT "D" OF THE BOARD OF TRUSTEES

Dr. H. H. McClanahan, Jr.: Policy of Non-Participation. At the 94th Annual Session, Jackson, 1962, Dr. Robert J. Moorhead introduced Resolution No. 8, subject: "Policy of Non-Participation," as the Delegate from Yazoo County. The resolving clauses are quoted:

"Resolved, That the House of Delegates of the Mississippi State Medical Association, in regular session assembled in Jackson, Mississippi, on May 10, 1962, hereby declares that neither it nor its members will be a party to nor participate in any system of medical care which it and they determine to be contrary to the best interests of their patients, and be it further

"Resolved, That a copy of this resolution be forwarded to the American Medical Association, the members of the Mississippi delegation to the Congress, and to the House and Senate of the Legislature of the Sovereign State of Mississippi."

The House of Delegates directed that the matter should be studied to a greater extent and referred the resolution to the Board of Trustees for study.

Study and Action by the Board of Trustees. Your Board of Trustees carefully considered this referral. Each individual member of the association is urged to give consideration to the *Principles of Medical Ethics,* particularly to Sections 1, 5, and 6:

Section 1. The principal objective of the medical profession is to render service to humanity with full respect for the dignity of man. Physicians should merit the confidence of patients entrusted to their care, rendering to each a full measure of service and devotion.

Section 5. A physician may choose whom he will serve. In an emergency, however, he should render service to the best of his ability. Having undertaken the care of a patient, he may not neglect him; and unless he has been discharged he may discontinue his services only after giving adequate notice. He should not solicit patients.

Section 6. A physician should not dispose of his services under terms or conditions which tend to interfere with or impair the free and complete exercise of his medical judgment and skill or tend to cause a deterioration of the quailty of medical care.

In the light of these sections, the Board of Trustees believes that no action should be taken on the resolution.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your Reference Committee considered the report of the Board relating to Resolution No. 8 introduced at the 1962 Annual Session, subject: "Policy of Non-Participation" by Dr. R. J. Moorhead. This resolution sought to have physicians declare that they would not be a party to nor participate in any system of medical care which they determine to be contrary to the best interest of their patients. The Board pointed out three sections of the *Principles of Medical Ethics of the American Medical Association* which assure the freedom of physicians to choose whom they will treat, which set out the objectives of the profession, and which relate to the disposition of professional services. In view of these sections of the Principles, the Board recommended that no action be taken on the resolution. The sponsor of the resolution concurs with the Board of Trustees and your Reference Committee recommends that Resolution No. 8, 94th Annual Session, be not adopted.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT "E" OF THE BOARD OF TRUSTEES

Dr. H. H. McClanahan, Jr.: Interprofessional Code for Mississippi Physicians and Attorneys. Following the 94th Annual Session, the president of the Mississippi State Bar, Hon. C. Sidney Carlton, conferred with our president, Dr. C. P. Crenshaw, suggesting that representatives of the two professional organizations meet and discuss the feasibility of developing an interprofessional code. Such codes have been successfully developed at national level and in several states. On July 10, 1962, an *ad hoc* committee of the Board of Trustees was appointed for this purpose consisting of Drs. George D. Purvis, chairman, William O. Barnett, and William E. Lotterhos, all of Jackson. Representatives named by the state bar were Hon. Junior O'Mara, chairman, Hon. Erskine W. Wells, and Hon. John A. Travis, Jr., all of Jackson.

Code Development. The joint committee worked together, developing a code draft acceptable to all members on the part of the state medical association and the state bar. On April 11, the Board enthusiastically approved the draft, commended its *ad hoc* committee, and voted its appreciation to the Mississippi State Bar.

Recommendation. The Board of Trustees recommends that the House of Delegates approve and adopt the proposed interprofessional code.

MISSISSIPPI INTERPROFESSIONAL CODE FOR PHYSICIANS AND ATTORNEYS

Preamble

The principal objective of the medical and legal professions is to render service to humanity with full respect for the dignity of man. Physicians are concerned with conservation of health and life, and attorneys, with the securing of justice in an orderly society of law.

The Mississippi State Medical Association and the Mississippi State Bar are jointly agreed that the provisions of this code are not laws but suggested guides for members of the two professions, subject to medical and legal ethics. Adoption of this code is an acknowledgement by physicians and attorneys of the interrelationship between medicine and the law, of their obligations to those whom they serve, and of their obligations to each other.

Obligations of Physicians

To Serve as a Witness. The physician has a professional obligation to serve as a witness in matters of controversy arising out of his patient's injury or illness. It is recognized that the merits of such controversies are often resolved only by medical evidence.

To Furnish Medical Information. The physician, upon proper authorization and reasonable notice of need for medical information, should furnish adequate medical reports to the attorney with respect to his patient's condition as relates to the injury or illness prominent in the litigation. It is understood, however, no privilege exists as provided and defined under the Mississippi Workmen's Compensation Act. The physician should assist the attorney's access to relevant medical information not under the former's control where circumstances of need, propriety and legality prevail.

To Furnish Medical Testimony. The purpose of medical testimony is to enlighten rather than to impress or prejudice the court. A physician should remember that he is not an advocate trying a lawsuit, nor should the physician feel that he is taking sides on any particular medical issue or medical fact. In presenting his testimony with objectivity, frankness, courtesy, and clarity, the physician should testify only as to medical facts of his own personal professional knowledge, in response to questions respecting a specific patient, or in response to hypothetical questions.

The physician and attorney should confer prior to the hearing at a mutually convenient time and place, fully and frankly discussing the medical aspects and problems involved, unless they are mutually agreed that conference is unnecessary.

General Obligations and Prerogatives. Since a physician may choose whom he will serve, he is not absolutely obligated, in the absence of a physician-patient relationship, to serve as examining physician or expert witness. Since, however, the honored ideals of the medical profession imply that the responsibilities of the physician extend not only to the individual but also to the health and well-being of society, the obligations of citizenship are such as to require the physician to consider carefully such proffered opportunities of service. Physicians are entitled to reasonable remuneration for time spent in furnishing medical testimony, information and reports.

Obligations of Attorneys

To the Medical Witness. The attorney should reciprocate the physician's promptness, objectivity, and respect during conferences and in the courtroom. Although the conduct of judicial proceedings cannot depend upon individual convenience, arrangements for a physician's appearance as a witness should take into consideration professional demands upon his time. Such arrangements should include advance notice as to the day and place and of the approximate time of his required appearance. Ordinarily, the attorney should not cause issue of a subpoena without prior notice to the physician. Since established rules of evidence afford ample opportunity to test the qualification, competence, and credibility of a medical witness, it is improper and unnecessary for the attorney to abuse the physician testifying. No officer of the court should attempt to improperly influence a medical opinion.

Requests for Medical Information. The attorney should request medical information and reports in writing, giving the physician sufficient advance notice of the need for the information. Documentation or description of authority to receive the information should be included by the attorney and the condition in respect to which the information is sought should be specified.

Payment of the Physician's Fee. As with the attorney, the physician is entitled to receive fair and reasonable compensation for professional services rendered, to include preparation of medical information and reports, time spent in conferences and in furnishing medical testimony, and for appearances as an expert medical witness. All of these are recognized as necessary and proper items of expense in litigation involving medical questions. The amount of the physician's fee should never be contingent upon the outcome of a case or amount of damages awarded. While the attorney is not personally responsible for payment of the physician's charges for medical treatment to the patient, he should exercise every possible effort to secure such payment, seeking, if necessary, the client's permission to pay the physician from any recovery made in the client's behalf.

Joint Obligations

Interprofessional Courtesy. Both the medical and legal professions are essential to society and their aims are virtually parallel. Each profession is comprised of honorable and learned individuals who are motivated by honorable aims and objectives. Each should strive, through understanding and cooperation, to uphold the dignity, integrity and respect of the other in the interests of their respective, yet similar, ideals and those whom they serve.

Interests of Patients and Clients. The physician and the attorney each should respect the confidences and privileges reposed in the other under law and ethics, always seeking the best interests of those whom they serve. Physicians and attorneys agree that delay in legal and medical matters can be extremely detrimental.

Disputes and Professional Propriety. The practices of medicine and law are inexact sciences. No physician can guarantee a cure nor can an attorney guarantee a particular judicial result in a matter at contest. Each profession recognizes that there will occasionally arise from these growing interprofessional relations differences of opinion and even perhaps interprofessional disputes. Public disclosure of any interprofessional complaint or criticism by a member of one profession against the other is to be deplored. Rather, the complaint should be referred through appropriate organizational mechanisms established for this purpose and all such complaints should be promptly and adequately processed. Such mechanisms for resolving grievances, misunderstandings and disputes should be utilized in the first instance and as a first resort. All such interorganizational procedures should be exhausted before employment of extraorganizational means.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your Reference Committee received the supplemental report and the proposed code. We associate ourselves with the Board of Trustees in

enthusiastically endorsing this code. We feel that it is a constructive beginning for better relations between the professions of medicine and the law. It should be understood by the House of Delegates that the code has not yet been adopted by the Mississippi State Bar but your Reference Committee understands that the Bar Association's Board of Trustees, which is called the Commissioners, has unanimously approved it. We, therefore, recommend adoption of the code and we commend the *ad hoc* committee of the Board which worked so diligently in the preparation of this code.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT "F" OF THE BOARD OF TRUSTEES

Dr. H. H. McClanahan, Jr.: Mississippi Medical Political Action Committee. At the 15th Annual Clinical Session of the American Medical Association at Denver, November 27-29, 1961, the House of Delegates approved the organization, goals, and purposes of the American Medical Political Action Committee. As provided in its by-laws, AMPAC is a non-profit, voluntary, non-partisan, unincorporated political action committee with membership available to physicians, their wives, immediate members of their families, and others. The purposes of AMPAC are:

(a) To promote and strive for the improvement of government by encouraging and stimulating physicians and others to take a more active and effective part in governmental affairs.

(b) To encourage physicians and others to understand the nature and actions of their government as to important political issues and as to the records, office holders, and candidates for elective office.

(c) To assist physicians and others in organizing themselves for more effective political action and in carrying out their civic responsibilities.

(d) To do any and all things necessary or desirable for the attainment of the purposes stated above.

Legal Status. The framework and method of operation of AMPAC as a national political action committee are established under applicable federal law. Although its organization, constitution and by-laws, and initial program were formulated and approved by the AMA through its Board of Trustees, the organization in no way jeopardizes the non-profit tax status of its parent body. For many years, the AFL-CIO has sponsored a similar national political action group, COPE, which supports labor-oriented candidates. The non-partisan aspects of AMPAC should be emphasized, since the group's support of individual candidates is based upon the position of each on issues of importance and interest to medicine.

State PAC's. Following formal approval of AMPAC by AMA, a board of directors was appointed and the several state medical associations were encouraged to organize state counterparts or state PAC's. To date, 47 such state organizations have been authorized, organized, and approved by their respective state medical associations. Just as AMPAC is legally separated from the American Medical Association, the state PAC's are so separated from their sponsoring state medical associations. This national organization and its state counterparts were astonishingly successful in the 1960 congressional election campaigns.

PAC Considerations in Mississippi. Through the 94th Annual Session in 1962, the Board of Trustees and the House of Delegates took the position that there was no need for organizing a political action committee in Mississippi. Since that time, the Board has reviewed and evaluated this position in the light of national political developments and the opportunities which a state PAC can provide. In these connections, the Board points out:

(a) A Mississippi Medical Political Action Committee provides a unique means for political education and offers physicians, their wives, and others a useful and stimulating vehicle for effective participation in governmental affairs.

(b) A state PAC offers a voluntary means by which Mississippi physicians can extend their influence and assistance in concert with their colleagues throughout the nation in the quest for good government.

(c) A state PAC can become a forceful influence in assuring continuation of good government in Mississippi.

Recommendation of the Board. Having reconsidered its position of 1962, the Board of Trustees recommends that the House of Delegates authorize and direct it to proceed with necessary studies and conference and to organize and make operational a Mississippi Medical Political Action Committee under the laws of the state and United States as a non-profit, voluntary, non-partisan political action committee affiliated with the American Medical Political Action Committee.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your Reference Committee heard extensive and lengthy discussion on the proposal to create a Mississippi Medical Political Action Committee. We were privileged to have the counsel of Dr. Vaun Adams, Mobile, Alabama, a member of the Board of Directors of AMPAC, Mr. Jack Drake of Chicago, Field Director for the organization, and Mr. William R. Ramsey, Chicago, AMA Field Service Division. Your Reference Committee believes that the Board of Trustees should be directed to investigate, organize, and make operational in Mississippi a Medical Political Action Committee. At the same time, we point out that there should be no dues increase in this connection and that the committee should be totally, legally, and entirely separate from the Mississippi State Medical Association. We are certain that the Board will report to this House of Delegates fully in these several respects. We express our deep appreciation to Dr. Adams, Mr. Drake, and Mr. Ramsey.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT "G" OF THE BOARD OF TRUSTEES

Dr. H. H. McClanahan, Jr.: Employment of an Executive Secretary. Mr. Rowland B. Kennedy has been employed by the Mississippi State Medical Association in the capacity of Executive Secretary for the past 13 years. For the first three years he served on a yearly contract. For the past 10 years he has served on two successive five year contracts. The present contract expires May 31 of this year. On May 13, the Board of Trustees voted to offer Mr. Rowland B. Kennedy a five year contract at the present salary and commended him for his work during the past five year contract period. Mr. Kennedy has indicated his willingness to accept this contract.

In accordance with Article VI, Section 4, of the Constitution, the Board of Trustees requests that this action be confirmed by the House of Delegates.

ACTION OF THE HOUSE OF DELEGATES

Without objection, the report was acted upon without referral and on motion by Dr. Lawrence W. Long, Jackson, second by Dr. H. C. Ricks, Jackson, the report was adopted.

SUPPLEMENTAL REPORT "H" OF THE BOARD OF TRUSTEES

Dr. H. H. McClanahan, Jr.: Emergency Medical Care for the State Legislature. Dr. C. G. Sutherland, Fraternal Delegate to Arkansas, who is also our Secretary-Treasurer, described to the Board of Trustees an emergency medical care program offered by the Arkansas State Medical Association to the Legislature when it is in session. The plan of operation is for the Board of Trustees to ask for volunteers to serve one day during the session in this capacity.

A first-aid station with a nurse is established in the State House with a nurse whose salary is paid by the State Medical Association. At the beginning of the legislative session each legislator is requested to fill out a brief medical history form and to state who his family physician is, what if any allergies he has, and whom should be notified in the event of a medical emergency. On the day that any doctor is to serve as a doctor of the day the legislator from his county introduces him to the House and to the Senate as a medical officer of the day. He may remain in the House or Senate Chambers or stay at the first-aid station at his pleasure or discretion. The Arkansas State Medical Association finds that this program has been gratefully accepted by the Legislature and that it has been invaluable in the matter of establishing rapport.

The Board of Trustees requests that the House of Delegates direct it to offer the Legislature of Mississippi a similar program.

ACTION OF THE HOUSE OF DELEGATES

Without objection, the report was acted upon without referral and on motion by Dr. Lawrence W. Long, Jackson, second by Dr. H. C. Ricks, Jackson, the report was adopted.

SUPPLEMENTAL REPORT "I" OF THE BOARD OF TRUSTEES

Dr. H. H. McClanahan, Jr.: Formation of a Committee on Medicine and Religion. The Board of Trustees, recognizing the advisability of establishing better liaison between the professions of medicine and the clergy for the benefit of patients, requests that the House of Delegates direct it to appoint a Committee on Medicine and Religion, this committee to be a standing committee of six members and to be a constitutional committee of the Board.

The following recommendation is made as an amendment to Chapter X of the By-Laws, adding Section 5 to read:

Committee on Medicine and Religion. The Committee on Medicine and Religion shall consist of six members. These members shall be appointed for terms of three years. On the initial appointment two members shall be appointed for

one year, two for two years, and two for three years. Reappointments shall be for terms of three years. The chairman of the committee shall be designated by the Board of Trustees. The committee shall formulate a program of action and will implement such a program after it has been approved by the Board of Trustees.

ACTION OF THE HOUSE OF DELEGATES

Without objection, the report was acted upon without referral. In discussion, Dr. McClanahan pointed out that the proposed amendment to the By-Laws must lie on the table for one year, since the introduction was being made at the adjourned meeting of the House of Delegates. He stated that if the report was adopted, the Board of Trustees would appoint the committee on an *ad hoc* basis for the 1963-64 association year. On motion by Dr. Lawrence W. Long, Jackson, second by Dr. Joseph B. Rogers, Oxford, the report was adopted.

REPORT OF THE SECRETARY-TREASURER

Dr. C. G. Sutherland: Duties and Responsibilities. Your Secretary-Treasurer, as an elected general officer of the association, is charged with the performance of such duties ordinarily devolving upon a secretary of a corporation by law, custom, and parliamentary usage. Additionally, he is the constitutional designee as chairman of the Council on Scientific Assembly. It is with gratitude that this, his second annual report, is submitted. It is divided into three areas: membership, fiscal reporting, and constitutional duties.

Membership. The total membership of your association during 1962 exceeded the four year average preceding that time and was virtually identical to the total for 1961.

(a) *Membership for 1962.* On December 31, 1962, there were on the rolls of the association 1,346 members in good standing as compared with 1,351 a year previously. This total includes:

1,173 paid members
100 Emeritus members
73 members exempt from dues other than Emeritus

(b) *Membership for 1963.* On May 1, 1963, there were 1,319 members in good standing on the rolls as compared with 1,312 on the same date a year ago. Among these are:

1,157 paid members
98 Emeritus members
64 members exempt from dues other than Emeritus

In the latter exempt group, 39 are exempt from dues by reason of training in AMA-approved residency programs, six are in military service, eight are associate members, seven are scientific members, and four are exempt by reason of undue hardship, all by reason of extended illness resulting in their being unable to practice.

(c) *Status of Current Reporting.* All totals reported have been adjusted to include only living members actually in Mississippi and those properly on the rolls who are outside the state. The association commends the following component medical societies for having secured 100 per cent of their renewable 1962 membership for the current year as of this reporting:

Amite-Wilkinson County Medical Society
Claiborne County Medical Society
Delta Medical Society
DeSoto County Medical Society
Homochitto Valley Medical Society
Pearl River County Medical Society
Tri-County Medical Society
West Mississippi Medical Society

Fiscal Reporting. In accordance with accepted practice, your Secretary-Treasurer submits a statement of your association's financial condition as of April 30, 1963, as an attachment to this report. The annual report of audit has been rendered by the independent certified public accountant based upon detailed examination of all books and records for 1962. The Council on Budget and Finance has reviewed fiscal records and the report of audit. Your Secretary-Treasurer offers the following comment in these connections:

(a) *Income and Revenues.* Dues income is stable, reflecting slight increases consistent with the growth of the profession in the state. Advertising revenue of your JOURNAL has declined about 30 per cent since 1960, approximately $1,400 per month on an annual basis.

(b) *Stability and Solvency.* In all respects, your association is financially solvent and stable. Every effort is exerted to effect economies and there is no deficit budgeting in any area of activity at any time.

Constitutional Duties. Your Secretary-Treasurer is an *ex officio* member of all councils and committees of your association. As such, he attends meetings of these groups and reviews minutes and reports of all such groups in the discharge of this responsibility.

MISSISSIPPI STATE MEDICAL ASSOCIATION

Statement of Financial Condition, April 30, 1963

ASSETS

Current Assets		
General Fund		
Cash on deposit	$75,140.91	
Due from Department of Defense, Medicare administrative costs	1,131.00	
Due from advertisers, JMSMA	5,996.81	
Other JMSMA receivables	685.86	$82,954.58
Medicare		
Cash on deposit, Professional Account	30,892.78	
Due from Department of Defense, Professional Account	29,107.22	60,000.00
Fixed Assets		
Land	13,605.30	
Building and equipment, less depreciation	82,075.22	95,680.52
Total book assets		$238,635.10

LIABILITIES AND NET WORTH

Current Liabilities		
Amortization, building, current year		$ 2,877.20
Long Term Liabilities		
Building	$38,417.03	
Medicare capitalization	60,000.00	98,417.03
Deferred Income		
Advance payments, 95th Annual Session		6,553.00
Net Worth		
Unappropriated net worth		130,787.87
Total liabilities and net worth		$238,635.10

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your Reference Committee deeply appreciates the work of our Secretary-Treasurer. He has devoted himself unstintingly to many tasks which require much of his time. In his report, he has informed us of the status of membership and of his participation with respect to the several councils and committees of the state medical association. Dr. Sutherland has informed your Reference Committee that his next annual report will contain more detailed information with respect to your association's finances. Your Reference Committee appreciates this and joins Dr. Sutherland in believing that this information will be useful to the membership in demonstrating the scope and extent of our activities. We approve the report of the Secretary-Treasurer and we commend his splendid performance in office.

The report of the reference committee was adopted.

REPORT OF THE COUNCIL ON BUDGET AND FINANCE

Report of the Secretary-Treasurer and Association Operations. We have considered the fiscal portion of the Report of the Secretary-Treasurer and we have examined the operation of the association with respect to all fiscal activities, including the report of the independent certified public accountant. The findings are to the satisfaction of your council. Prior to this annual session and during the annual session, we met for these purposes and have conferred with the Board of Trustees. We have determined that all accounts, receipts, and disbursements are regular and authorized.

Association Budget. We have considered the 1963-64 budget for operation of your association. We have conferred with the Board of Trustees who concur in our recommendations. Each item has been carefully evaluated as to necessity and adequacy. We recommend a total budget of $727,797 which includes the following sums for purposes stated: (1) For general operation of all activities and departments of the association, including production of your JOURNAL, $92,785.78; (2) for building amortization, utilities, maintenance, taxes, and associated expenditures, $12,488.54; (3) for professional fee aspects of the Medicare program, $600,000. This is a decrease from our 1962-63 budget of more than $5,000 or about 4 per cent of working funds. We recommend adoption of this amount as being a realistic minimum for continued effective operation of your association.

Insurance and Safeguards. We have examined a survey of insurance owned by the association on its physical properties and we find it adequate. Suitable safeguards for disbursement procedures, fidelity bonds, and proper safekeeping for records have been provided.

The report of the council was adopted.

REPORT OF THE EXECUTIVE SECRETARY

Mr. Rowland B. Kennedy: Duties and Responsibilities. Your Executive Secretary is responsible for maintaining the headquarters offices and for conducting the administrative affairs of the association, in accordance with Article VII of the Constitution and Section 7, Chapter VII of the By-Laws. In the discharge of these duties, activities of the staff are divided into supportive and administrative roles. The former includes assisting, through various staff services, the general officers and official bodies, while the latter consists of performing, under appropriate policy direction,

fiscal, publishing, research, and internal administrative tasks.

Specific Activities. In the conduct of supportive and administrative activities, your Executive Secretary reports directly to appropriate supervisory sources while maintaining responsibility to the officers and Board of Trustees. For example, activities related to organization and production of your JOURNAL MSMA are reported to the Committee on Publications, and administration of the Dependents' Medical Care Program, to the State Medicare Review Board. For this reason, this annual report is purposely general in nature and brief in scope.

Staff and Facilities. During the 1962-63 association year, your staff was privileged to increase many of these services without numerical increase of personnel. This is possible—in the light of declining income and revenues—only because the association has provided modern headquarters facilities which promote and encourage efficiency and because of the splendid skilled and competent staff associates with whom it is your Executive Secretary's privilege to work. Each of us in your service expresses appreciation for the support given us and the confidence reposed in us.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

The Reference Committee considered the report of the Executive Secretary in which he delineated the administrative and supportive roles of the executive staff with respect to the work of the association. We are happy to announce formally that the Executive Secretary has been tendered and has accepted a new five year contract with the association. Mr. Kennedy worked three years with no contract, worked five years under his first formal contract, and has just completed his second five year contract. We appreciate not only his service but also that of the dedicated, able, and diligent people who comprise the staff. We commend our executive staff who seem willing to work with no thought as to clocks and calendars in the service of medicine.

The report of the reference committee was adopted.

REPORTS OF THE DELEGATES TO AMA

Dr. John F. Lucas: 111th Annual Session. The 1962 annual session of the American Medical Association was conducted at Chicago June 24-28, 1962. As your accredited delegate, I submit this summary report. Principal issues before the House of Delegates were health care for the aged, jurisdiction for judicial purposes, organization of the Board of Trustees, a proposed additional certifying board, relations with a major surgical organization, and voluntary health insurance. The official attendance was 42,643 among whom were 14,092 physicians. The scientific activity was extensive and the 1962 AMA Distinguished Service Award was presented to Dr. Russell L. Cecil of New York. Your delegates were accompanied by the president of your state medical association and a number of Mississippi physicians.

Health Care for the Aged. In acting favorably on 17 resolutions expressing full support of the Kerr-Mills program and firm opposition to King-Anderson-type legislation, the House declared that "the Kerr-Mills method should be given a fair and reasonable chance to meet the need and thus remove the demand for further federal legislation." In opposing King-Anderson-type legislation the delegates reiterated their former position and cited the following reasons:

(a) The lack of need for such legislation.

(b) The total inadequacy of the proposal for those who need help.

(c) Governmental controls through Social Security and inevitable expansion of any such program to a full system of socialized medicine.

(d) Deterioration in the quality of care not only for the aged but for all citizens.

Judicial Procedures. The AMA By-Laws were amended to include a recommendation made previously by the Medical Disciplinary Committee with respect to the AMA assuming original jurisdiction, so that Section 1 (B), Chapter IV now reads:

> "In addition to such disciplinary action as may be taken under the constitution and by-laws of the component (local) society and constituent (state) association to which the member belongs, or when a state medical association to which a member belongs requests the AMA to take discplinary action, or when at the request of the American Medical Association the state association to which the member belongs consents to disciplinary proceedings by AMA, the Judicial Council, after due notice and hearing, may censure him, or may suspend or expel any member of the American Medical Association from AMA membership only for an infraction of the constitution or these by-laws or for a violation of the Principles of Medical Ethics."

Thus, the issue was one of each state association continuing to exercise primary authority in matters of medical discipline and this principle was upheld.

Other Actions. The House of Delegates acted on other matters as follows:

(a) *Board of Trustees.* Approval was given an *ad hoc* committee recommendation to expand the Board of Trustees from 11 to 15 members, adding the immediate past president for one year term and three additional Trustees, reducing terms of office from five to three years for those elected. Maximum service was fixed at nine years. Final action, however, was not then taken because of the amendment process.

(b) *American Board.* On recommendation of the Council on Medical Education and Hospitals, the House declined to recognize and authorize an American Board of Abdominal Surgery. The action voiced disapproval in principle of establishing specialties which are based largely or wholly on an arbitrarily defined anatomical region of the body.

(c) *Assistants at Surgery.* AMA and a major surgical organization have been at controversy over practices which the latter construes as division of fees with regard to employment of assistants at surgery by the attending surgeon. The five point policy adopted in 1961 was reaffirmed.

(d) *Voluntary Health Insurance.* A report of the Council on Medical Service on utilization of public funds for purchase of voluntary prepayment or health insurance plans for certain indigent individuals was adopted. The report specified need for health protection for such individuals, a requirement that those able to pay for care do so, a reiteration of escalation of public responsibility, a requirement that any such program be devoid of government controls, the upholding of dignity and self-sufficiency of the individual, and effectiveness for the plan as opposed to token coverage.

(e) *Non-Participation.* The House did not adopt a resolution urging a policy of non-participation in event of enactment of King-Anderson-type legislation.

Election of Officers. Dr. Edward R. Annis of Miami was elected president-elect and Dr. J. P. Culpepper, Jr., of Hattiesburg, vice president. Dr. George M. Fister of Ogden, Utah, was inaugurated president.

Appointment of Trustees. At the 16th Clinical Session at Los Angeles, November 25-28, 1962, Dr. Culpepper was appointed to serve until June 20, 1963, as a member of the Board of Trustees in place of Dr. Hugh H. Hussey who resigned.

Personal Comment. On December 31, 1962, your reporting delegate retired from office, having served 10 consecutive years. To our own House of Delegates, our Board of Trustees, our officers, and members, I express profound appreciation for the opportunity of service and for the support I have enjoyed. I express high confidence in my successor, Dr. George E. Twente, and I pledge my continued support to the association and our profession.

Dr. J. P. Culpepper, Jr.: 16th Clinical Session. The 1962 clinical session of the American Medical Association was conducted at Los Angeles, November 25-28, 1962. As your accredited delegate, I submit this summary report. Major issues before the House of Delegates involved health care for the aged, medical ethics, organization of the Board of Trustees, and organization of the scientific sections. The official attendance was 10,908 among whom were 5,209 physicians.

Health Care for the Aged. In expressing the association's unanimous opposition to King-Anderson-type legislation, the president, Dr. George M. Fister, stated in his address that "We will not compromise on the fundamental principles in which we believe and for which we have fought in the past with courage and good judgment." In reaffirming the association's position, the House of Delegates approved four proposed amendments to the Kerr-Mills Act:

(a) Removal of the requirement that both OAA and MAA aspects of the law be administered by the same state agency.

(b) Provision for flexibility in administration of income limitations (means tests) under state law to take into account the expense of major illness as a qualifying factor for assistance.

(c) Provision for medical association-sponsored advisory committees in state program administration.

(d) Assurance of free choice of physician and hospital under state programs.

Four proposed amendments to the Internal Revenue Code of 1954 were also approved to permit liberalization of income tax deductions for medical care expenses.

Medical Ethics. The Judicial Council reported new opinions concerning physician ownership of drug stores, drug repackaging houses, and drug companies; dispensing of glasses by ophthalmologists; and advertising practices of medical laboratories. Only that portion of the report relating to advertising practices by medical laboratories was acted upon. In this connection, the delegates agreed that the propriety of such practices should be determined at the local level in compliance

with the new opinion which has since been published. The remaining matters were returned to the Judicial Council for further study and report.

Board of Trustees. By a vote of 130 to 48, after spirited debate, the House enlarged the Board of Trustees from 11 to 15 members and reduced terms of office from five to three years. This had the effect of amending the By-Laws but absence of registered delegates prevented amendment of the Constitution. The latter will be voted on at the 1963 annual session.

Scientific Sections. A recommendation for a major reorganization of the several sections of the Scientific Assembly was submitted to an *ad hoc* committee of the House for study because of objections to some organizational recommendations and method of selection of section officers.

Other Actions. The House of Delegates acted on other matters as follows:

(a) *Compensation of Physicians in Training.* No action was taken on a controversial proposal to increase stipends to interns and residents by permitting them to associate in professional practice groups with hospital staffs so as to receive fee-for-service payment from insurance and voluntary prepayment plans.

(b) *Foreign Graduates.* Changes were made in the requirements for intern training program approval mechanisms to require that at least 25 per cent of any intern staff must be graduates of AMA-approved medical schools. This requirement is in addition to and does not alter the prior "25 per cent rule" with regard to a training hospital's securing quotas for approval purposes.

(c) *Hill-Burton.* The House asked that federal funds for "diagnostic and treatment centers" be discontinued as to prevent federal subsidy of facilities for closed panel groups and medical corporations.

(d) *Miscellaneous Actions.* Approval was given new educational curricula for inhalation therapy technicians as well as cytotechnologists. A revision was approved for requirements for pediatric residencies. Delegates warned that immunization against smallpox was at a dangerously low level and urged vaccination and revaccination but no crash program. Closer liaison between public health departments and medical associations was asked, keeping in mind "the need for a proper balance between public health programs and the private practice of medicine."

AMA-ERF. The American Medical Association Education and Research Foundation received gifts at the session in the amount of $540,500 and a special report of the highly successful loan program, since published to all members, was made.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Our AMA delegates have been energetic and able in representing our association in medicine's parent body. We approve their reports and commend these officers. Your reference committee feels that it could add little to the expression of the House of Delegates to Dr. Lucas when he was accorded a standing ovation upon delivering his final report. We do, however, add our profound appreciation to him.

On motion by Dr. William E. Lotterhos, second by several, the commendation in the report was extended to include Dr. Culpepper. The House of Delegates accorded Dr. Lucas a standing ovation and as amended, the report of the reference committee was adopted.

ANNOUNCEMENT OF NOMINATING COMMITTEE

Following a recess for caucuses by association districts, the Nominating Committee was announced;

Howard A. Nelson, Greenwood, District 1
Joseph B. Rogers, Oxford, District 2
Jack M. Senter, Belmont, District 3
Mal S. Riddell, Jr., Winona, District 4
William E. Lotterhos, Jackson, District 5
Lamar Arrington, Meridian, District 6
Andrew J. Carroll, Jr., Hattiesburg, District 7
A. V. Beacham, Magnolia, District 8
C. D. Taylor, Jr., Pass Christian, District 9

Dr. Arrington was designated chairman by the committee which conducted open sessions on May 15, 1963.

REPORT OF THE COUNCIL ON SCIENTIFIC ASSEMBLY

Dr. C. G. Sutherland: Organization and Duties. Your Council on Scientific Assembly is selected pursuant to Section 3, Chapter IX, By-Laws of the association, and is charged with planning the annual session to include all phases of scientific activities. The council consists of the chairmen of the seven formal sections and your Secretary-Treasurer.

The 95th Annual Session. Your council feels that the renovation and expansion program undertaken by the management of the Buena Vista has assisted greatly in programming and scheduling the present annual session, eliminating to a large extent the necessity of conducting many

functions at other than the headquarters hotel. We express our appreciation for the new facilities.

Seminar on Medicine and Religion. The unprecedented success of the Symposium on Space Medicine at the 94th Annual Session at Jackson in 1962 encouraged your council to seek another special program of national importance for presentation at the 95th Annual Session. The organization and establishment of a Department of Medicine and Religion by the American Medical Association and the growing awareness of relations between theology and medicine made the seminar both logical and appropriate. We have been fortunate in securing the services of four outstanding clergymen and a physician church leader who, with our president, will comprise the membership of the seminar.

Scientific Achievement Award. Your council, believing that members of the association should be furnished greater incentive and recognition for presentation of scientific exhibits, recommended that the Board of Trustees approve creation of the Mississippi State Medical Association Scientific Achievement Award to be presented annually to the member or members whose scientific exhibit is adjudged best at the annual session. The Board concurred and the L. G. Balfour Company, Attleboro, Massachusetts, was commissioned to design and strike a medallion for this purpose. The obverse side identifies the association, its crest, and founding date, while the reverse identifies the award, provides an engraving area for the recipient's name, and contains a portion of the Preamble to the MSMA Constitution, all in *bas relief.* The first such presentation will be made during the present annual session.

Ainsworth Resolution. Your council continues to encourage representation of the specialties of urology, orthopaedic surgery, neurological surgery, anesthesiology, pathology, and radiology among papers before the seven scientific sections. In this connection, written invitations were extended to each specialty society concerned.

Exhibits. The new and additional Hurricane Room facilities in the Buena Vista provide for separate but contiguous space for both scientific and technical exhibits.

(a) *Scientific Exhibits.* Your council is gratified with the increase in participation in the scientific exhibit, as well as the quality of the current presentations.

(b) *Technical Exhibits.* Each member of the association is encouraged to visit each booth in the technical exhibit, budgeting sufficient time to become acquainted with professional service representatives and the products and services which are displayed.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Your Reference Committee considered the annual report of our Council on Scientific Assembly. We feel that the Council deserves special commendation for the program it has presented at this 95th Annual Session. Especially, do we express appreciation to the Council for the outstanding Seminar on Medicine and Religion.

The report of the reference committee was adopted.

OPEN SESSION OF THE HOUSE OF DELEGATES

The House of Delegates entered upon open session during which various distinguished guests of the association were presented by the Speaker.

ADDRESS OF THE PRESIDENT

The President of the association, Dr. C. P. Crenshaw, delivered his address to the House of Delegates by remote long distance telephone circuit from his home in Collins where he was confined because of personal illness. The address has been published separately in Volume IV, Number 7, JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION, July 1963.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your Reference Committee associates itself in the several remarks already made with respect to the inability of Dr. Crenshaw to be present with us at the opening meeting of the House of Delegates. We feel, however, that his address was in no way less important or diminished by his absence by virtue of the remote telephone transmission hookup which was made possible by the Southern Bell Telephone Company.

We feel that our president has admonished us wisely and we believe that his advice to the association is indeed timely. He has stated this:

"Our chief concern must, therefore, be centered around the individual. As physicians, we ought to be the first to appreciate that the biological design of creation included no governments, no programs of subsidy, no usurious controls—just individuals occurring within a balance of nature."

Dr. Crenshaw's address, your committee hopes, will be published in our JOURNAL and we hope that every member of the association will give

this monumental document full and complete consideration, recognizing the wisdom, timeliness, and authenticity of what he has stated to us. We approve the address of the president and in recommending its adoption, we also add the hope of the committee that Dr. Crenshaw will soon enjoy a full and complete recovery from his present indisposition.

The President, although physically absent, was accorded a standing ovation and the report of the reference committee was adopted.

RESOLUTION NO. 4, EXPRESSION OF THE HOUSE OF DELEGATES TO THE PRESIDENT

Under a suspension of the rules, the following resolution was introduced in behalf of all component medical societies of the association immediately following the address of the President:

Dr. John G. Archer: WHEREAS, Dr. C. P. Crenshaw of Collins, Mississippi, has ably served the Mississippi State Medical Association as President during the 1962-63 association year, and

WHEREAS, Personal illness has prevented Dr. Crenshaw's being present among his colleagues at the opening meetings of the 95th Annual Session, and

WHEREAS, The association desires to emphasize its esteem for Dr. Crenshaw and to express every good wish for his early and complete recovery, now, therefore, be it

Resolved, That such good wishes are sincerely tendered and that the 95th Annual Session be dedicated to our colleague and President, C. P. Crenshaw.

ACTION OF THE HOUSE OF DELEGATES

Without objection, the resolution was unanimously adopted.

REPORT OF THE COUNCIL ON MEDICAL SERVICE

Dr. Guy T. Vise: Council Organization and Duties. The Council on Medical Service is responsible for the study of all aspects of medical care in Mississippi and the circumstances under which it is provided. The council is a standing body of this House of Delegates, elected under the provisions of Section 2, Chapter IX, By-Laws of the association. It is assisted in its work by seven constitutional and, during the year reported on, three *ad hoc* committees, a working force of 74 physicians in elected, appointed, and consultant capacities. During 1962-63, these several groups met on 15 occasions, conducted various conferences, and represented the association at four national meetings. The committees are:

(a) *Constitutional Committees*

(1) Cancer Control.
(2) Occupational Health.
(3) Federal Medical Services.
(4) Maternal and Child Care.
(5) Mental Health.
(6) Diseases of the Heart.
(7) Aging.

(b) *Ad Hoc Committees*

(1) Blood and Blood Banking.
(2) Disaster Medical Service.
(3) Physical Therapy.

Committee Activities. Programs, studies, and activities of the council's several committees embrace a wide variety of subject areas. Among these are:

(a) *Cancer Control.* This body continues to monitor operation of the seven accredited tumor clinic programs in Mississippi, the cytologic screening program and growing services of the centers, and the series of studies being conducted under the auspices of the American Cancer Society.

(b) *Occupational Health.* The committee concluded its studies of public and private agencies concerned with rehabilitation of the occupationally disabled and recommended organization of a quasi-official Council on Rehabilitation. This proposal was approved by the Council on Medical Service and the House of Delegates and subsequently appointed by the Governor. The committee chairman, Dr. George D. Purvis, Jackson, was named chairman of the Council on Rehabilitation. This body met on five occasions during the association year and concluded that:

(1) There is need for better communication of case findings with respect to injured workers in accomplishing the rehabilitation process.

(2) Apart from care of acute phases which is deemed adequate, maximal utilization is apparently not being made of existing facilities, particularly general medical and surgical hospitals, in rehabilitation services.

(3) There is need for evaluation of rehabilitees by those trained in social case work in the interest of contributing to better appraisal of the individual's total rehabilitation problem.

(4) Rehabilitation should be the principal objective of any workmen's compensation program and the occupationally disabled should be pro-

vided with incentives to seek rehabilitation services.

Following approval by the American Medical Association of a "Guide to Small Plant Occupational Health Services," the committee feels it important to initiate studies to determine the scope and extent of such programs (as distinguished from workmen's compensation service) among Mississippi industrial establishments. The council has approved the proposed studies and agrees with the committee that they will be useful in promoting sound health practices in industry, encouraging healthful work environments, promoting plant safety, encouraging comprehensive and meaningful pre-employment physical examinations, assisting employers in costs reduction by reducing absenteeism, sickness, and accidents, and facilitating better placement practices according to valid health and medical criteria.

The council applauds the valuable work of this committee and approves its various findings and recommendations.

(c) *Federal Medical Services.* The council has assigned this committee the task of restudying the Veterans Administration hospital and medical care program with emphasis on non-service-connected care, length of patient stay, operational policies, patient furloughs or leaves, and a review of changes in applicable federal laws during the past 10 years. Approximately 12 years have elapsed since the last study by the association was made in this connection.

(d) *Maternal and Child Care.* This committee has completed five consecutive years study of maternal mortality in Mississippi, reviewing data on each case for which definitive information is secured. Summaries of annual findings are published in JOURNAL MSMA as well as case reports. The committee has expressed appreciation for cooperation and support by physicians and the council commends this group and its activities. The committee has recommended that studies be conducted with respect to legal shelter through appropriate legislation for studies in maternal mortality and the work of tissue and audit committees.

(e) *Mental Health.* Participation by the association in the AMA-sponsored National Congress on Mental Illness and Health was directed by this committee. Through consultants serving on a steering committee, the Committee on Mental Health made these findings with respect to Mississippi:

(1) Approximately 700 alcoholics and 150 drug addicts were admitted to the Mississippi State Hospital during 1962. Suitable institutional facilities are needed for (1) temporary care of such patients with acute medical problems, (2) care of these patients who can be rehabilitated with short term treatment, and (3) long term care for those with poor prognoses and destructive tendencies.

(2) Recognizing that disturbed adolescents and rebellious children are best cared for in other than a mental hospital, a need for a specialized facility is indicated. Such patients should not be subjected to association with children in penal institutions nor with other patients in a mental hospital.

(3) A majority of patients over age 65 do not require psychiatric care and their admission to a mental hospital is inappropriate and detrimental to the mission of the institution.

(4) With reference to these and related problems, there is need for improved lateral communication among public and private agencies concerned wtih care of mental illness.

Concern was expressed with the apparent surge of popular, non-medical interest in affording immediate and forceful impetus to development of new public and private programs in care of mental disease. In these connections, the committee believes that:

(1) There must be a rational professional assessment of needs which are demonstrable, and

(2) We must strengthen the capabilities which we already possess, working always within the realm of the possible.

(3) There are four specific problem areas in which we are now challenged, in the following priority:

(a) Personnel recruitment and training,
(b) Adequate funds,
(c) Research, and
(d) Facilities development.

The Council on Medical Service approves and commends the work of the committee.

(f) *Other Committee Activity.* The Committee on Aging, concerned with widely divergent activities, serves other association groups in two ways: By advising and sponsoring a continuing education program and by accumulating data for further use. The Committee on Diseases of the Heart has amassed data on programs of physical fitness and its members have participated in programs and symposia in these areas of interest. Because of development of such programs at national level, formal activity was deferred for the time. The Committee on Blood and Blood Banking will con-

duct a second blood bank and transfusion service workshop-institute in conjunction with the Mississippi Hospital Association. It continues its studies in organizational, medicolegal, socioeconomic, and technical aspects of blood banking. The Committee on Disaster Medical Care is supporting the Medical Self-Help Training Program and the work of the Committee on Physical Therapy having been concluded with adjournment of the regular session of the legislature, the committee was discharged with the appreciation and commendation of the council.

Areawide Hospital Planning. Your council has been disturbed over efforts from the national level to implement a system of areawide hospital planning. Under such a concept, hospital development is permitted only to the extent that a single major center in a given area possesses full hospital care capabilities with the remaining institutions in satellite capacities. The concept not only denies full exercise of local prerogative and autonomy in construction and operation of hospital facilities but it also suggests grave and inherent dangers to the free exercise of private practice and to local determination of hospital staff policy. In the light of these reasons, the council recommends that the association express its reservations with respect to areawide hospital planning and withhold its approval of this concept.

Mississippi Hospital Association. The chairman of your council is privileged to serve on a three member *ad hoc* committee of the Board of Trustees which serves as a liaison mechanism between the association and the Mississippi Hospital Association. Many areas considered by this body are concerned with your council's sphere of interest.

Officers of the Council. During the 1962-63 association year, Dr. Guy T. Vise, Meridian, served as chairman of the council and Dr. M. Q. Ewing, Amory, as vice chairman. Two members elected at the 94th Annual Session, Dr. Edward Pennington, Ackerman, District 4, and Dr. Temple Ainsworth, Jackson, District 5, were welcomed to the council.

RESOLUTION NO. 5, AREAWIDE PLANNING FOR HOSPITALS

Dr. Robert J. Moorhead: WHEREAS, The U. S. Public Health Service in collaboration with the American Hospital Association has conducted a survey and issued a joint report on "Area-Wide Planning for Hospitals," and

WHEREAS, This report, as well as a burgeoning literature on the subject, presents the thesis that only the big voluntary non-profit or government hospital can render complete or the best medical service, and

WHEREAS, This report, and many others, indicate a conclusion that making a profit from providing hospital care *ipso facto* means rendering "sub-standard" care, is "sinful," and is not to be tolerated, and

WHEREAS, These reports referred to above further advance the seductive argument that the building of private-for-profit hospitals may deprive a community of an "opportunity" to obtain government funds for a non-profit institution, and

WHEREAS, These reports encourage compulsory area-wide planning for hospitals and other health facilities to be implemented by legalized state agencies, and

WHEREAS, The President of Blue Cross, Mr. Walter M. McNery, has been quoted as stating, "any group which builds without reference to community planning jeopardizes the solvency of Blue Cross," and

WHEREAS, The profit motive, operating in a climate of free enterprise where supply and demand and free competition are the controlling principles has resulted in the finest quality of medical and hospital care, and the healthiest people ever known, and

WHEREAS, The proposals for compulsory areawide planning for hospitals violate these principles so fundamental to further improvement in the quality of medical care for our people, now, therefore, be it

Resolved, That the House of Delegates of the Mississippi State Medical Association, in regular session assembled in Biloxi, Mississippi, on May 16, 1963, views with alarm this already well-developed movement to control construction and operation of new and/or the expansion of existing health facilities and urges the members of MSMA to be extremely wary of such plans as may appear in their individual communities, and be it further

Resolved, That the properly designated committee or arm of Mississippi State Medical Association make a factual study of "Area-Wide Planning for Hospitals and Health Services," and supply the information gained to the members of MSMA.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

Since this report is concerned with a number of disassociated topics, your Reference Committee asks that it be permitted to consider the report

ad seratim as regards the several separately designated sections of the report.

First, your Reference Committee wishes to call attention to the extensive organization of the Council which consists of seven constitutional committees, and, during the year reported on, three *ad hoc* committees among which there were 74 physicians.

(a) Your Reference Committee considered that portion of the report relating to the Committee on Cancer Control and approves the activities of this committee.

(b) Your Reference Committee considered that portion of the report relating to the Committee on Occupational Health. We invite your attention to the study proposed by this committee to determine the scope and extent of occupational health programs in Mississippi industry, and we concur in the recommendations made by the Council on Medical Service in this connection.

(c) Your Reference Committee considered that portion of the report relating to the Committee on Federal Medical Services. Your committee believes that the data furnished by the committee's past study of the Veterans Administration's hospital and medical care program was valuable and useful and we concur in the Council on Medical Service's recommendation that this study be again undertaken.

(d) Your Reference Committee considered that portion of the report relating to the Committee on Maternal and Child Care and we urge that this committee continue its important study of maternal mortality in Mississippi.

(e) Your Reference Committee considered that portion of the report relating to the Committee on Mental Health. This committee has been very active in both state and national mental health activities. Your committee concurs in and approves these activities.

(f) Your Reference Committee approves the activities of the Committees on Blood and Blood Banking, Diseases of the Heart, Disaster Medical Care, and Aging. Your committee understands that these committees are working on previously initiated programs.

(g) Your Reference Committee simultaneously considered that portion of the report relating to area-wide hospital planning and Resolution No. 5, subject: "Area-Wide Hospital Planning." Your committee concurs in and approves the Council on Medical Service's recommendation that "the association express its reservations with respect to area-wide hospital planning and withhold its approval of this concept." We are grateful that a full and thorough discussion of this matter was conducted by your committee in open session. While we are in sympathy with the intent of Resolution No. 5, we feel that the expression by the Council on Medical Service, the adoption of which we have recommended, is sufficient and we recommend that no action be taken on this resolution.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT "A" OF THE COUNCIL ON MEDICAL SERVICE

Dr. Guy T. Vise: Implementation of Kerr-Mills Program in Mississippi. At the 93rd Annual Session, Biloxi, 1961, the House of Delegates approved Public Law 86-778, the Kerr-Mills program, which became effective October 1, 1960. It will be recalled that this law revised and amended then-existing laws to permit increases in vendor medical payment for (1) recipients of Old Age Assistance (OAA) and (2) created a new category of vendor medical payments for those individuals over age 65 who are not receiving OAA but whose incomes and resources, as determined by the states, are insufficient at one time or another to permit purchase of necessary medical services. This provision is known as Medical Assistance for the Aged (MAA) and is the only new concept in the program.

(a) *Support of Kerr-Mills.* The American Medical Association and each of its 54 constituent state and territorial medical associations supports Public Law 86-778. Generally, the bases for this support are:

(1) It is voluntary, not compulsory.

(2) It helps those who need help with benefits based on need and local determination.

(3) It is administered locally, with all benefits offered determined by the states on the logical theory that each state knows its needs and problems better than the federal government.

(4) It is far more economical than King-Anderson-type legislation and it assures continuation of voluntary prepayment and health insurance by supplementing rather than supplanting.

(5) It assures that the quality of medical care will be high and infinitely superior to compulsory federal care under Social Security as proposed in King-Anderson-type legislation.

(b) *Implementation of Kerr-Mills.* At this reporting, 39 states and territories have implemented some form or aspect of the Kerr-Mills program. All have expanded or improved medical services under OAA and 31 have enacted MAA programs. Mississippi has only a minimal OAA program offering $15 per day toward costs of hospitalization for a period of 20 days.

(c) *Expression of the House of Delegates.* At the 94th Annual Session, Jackson, 1962, the House of Delegates stated that "there has been insufficient implementation of the Kerr-Mills program in Mississippi. This implementation is less than that necessary or satisfactory as regards physicians, hospitals, and the public." The House voted that "the Council on Medical Service restudy this program and present further recommendations for meaningful implementation of this law."

Implementation Efforts. Under the supervision of the Board of Trustees, a Medical Assistance Act was drafted and introduced before the final special session of the Mississippi Legislature in 1962. It will not be the purpose of this report to discuss legislative activity which is in the purview of the Board. Rather, the broad aspects of the program, in accordance with instructions from the House of Delegates, will be considered. Each area was, however, included in the proposed enactment.

(a) *Concept of Implementation.* Any meaningful implementation of Public Law 86-778 must provide for vendor medical payments under MAA as well as OAA. The extent of services should be as comprehensive as locally determined needs require and the ability of the state to pay for them. In accordance with association policy as well as the letter and spirit of House Bills 278 and 279 of the 1962 Regular Session of the Mississippi Legislature, a means test should be required for determination of need. Medical need must be determined by a physician. Finally, a medical advisory mechanism should be prescribed in the law for the following purposes and to assure medical orientation of the program:

(1) To advise and assist the administering agency and personnel thereof with respect to determining the quantity and extent of medical care which can and will be provided.

(2) To communicate the views of the medical profession in these respects to the administering agency.

(3) To communicate the views of the administering agency to the medical profession.

(4) To encourage physicians to participate in medical care programs authorized and prescribed in the law, although such participation should not be mandatory upon any physician.

Any such law should provide that:

(1) All medical care rendered under any title or section to any category of patient be solely under the supervision of a physician.

(2) No order or regulation shall be promulgated which limits or abridges the recipient's free choice of physician and hospital.

(b) *Amendments to Public Law 86-778.* Since the original enactment, the Congress has amended the Kerr-Mills program to provide a small increase in vendor medical payments. Additionally, the American Medical Association has proposed four amendments to increase flexibility in administration and determination of benefits by the several states, to provide in statutes for medical association-sponsored advisory committees, and to assure free choice of physician and hospital.

Opinion of the Council. Within these broad frames of reference, your Council on Medical Service believes that the instructions of the House shall have been carried out with such an enactment and that a meaningful implementation of the Kerr-Mills program in Mississippi can thus be realized.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your Reference Committee considered the supplemental report of the Council on Medical Service in connection with the implementation of the Kerr-Mills program. It will be recalled that this House of Delegates expressed dissatisfaction with the degree of implementation of this law in Mississippi at the 1962 Annual Session. The Council on Medical Service has fulfilled the request of the House in developing factual data with respect to implementation and the Board of Trustees has drawn and introduced a suitable implementation enactment in the Legislature as stated in their annual report. Your Reference Committee approves the action of the Council and the Board in this connection.

The report of the reference committee was adopted.

REPORT OF THE COMMITTEE ON AMERICAN MEDICAL ASSOCIATION EDUCATION AND RESEARCH FOUNDATION

Dr. Raymond F. Grenfell: Organization and Duties. Your Committee on AMA-ERF is composed of one member from each component medical society appointed annually by the president. The committee coordinates its activities with the national foundation and seeks voluntary contributions from Mississippi physicians for medical education and research. All contributions to AMA-ERF are tax deductible and every dollar received is put to work in a medical school.

1962 Contributions. Your committee is happy to report that Mississippi physicians contributed

$8,438.82 to AMA-ERF during 1962. This represents an almost 70 per cent increase over 1961 contributions. Nationally, contributions in 1962 were $1,461,810.92, a 12 per cent increase over 1961. Recently, it was my privilege to join the president, Dr. Crenshaw, in presenting a 1962 AMA-ERF check to the University of Mississippi School of Medicine in the amount of $13,068.74. Over one-half of this amount represented contributions from Mississippi physicians, the rest was the University's share of undesignated contributions.

AMA-ERF Medical Student Loan Program. Your committee feels that the new student loan program supported by contributions to AMA-ERF deserves special comment. This program has been an unqualified success. In its first 10 months of operation, 5,299 loans worth $6,111,400 were made to medical students, interns, and residents.

1963 Program. Your committee earnestly solicits the support of every Mississippi physician in 1963. We owe much to our medical schools and have a proper interest in their continued success. Nothing could possibly emphasize this interest more than a 1963 contribution to AMA-ERF.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Your Reference Committee commends the activities of this important committee and urges each member of this association to financially support his medical school.

The report of the reference committee was adopted.

RESOLUTION NO. 1, IN MEMORIAM

Dr. C. G. Sutherland: WHEREAS, There are absent from among our numbers 22 members who have been called by Divine Providence since the 94th Annual Session; and

WHEREAS, Although we are grieved upon the passing of these beloved colleagues and friends, we are inspired by their lives of service and professional attainment; and

WHEREAS, This expression of our grief, deep affection, and respect should be recorded permanently among official records of the Mississippi State Medical Association, now, therefore, be it

Resolved, That this House of Delegates does mourn the passing of the following esteemed colleagues:

James A. Brimson, Jackson, May 29, 1962
Walter G. Brock, West, November 14, 1962
Edwin M. Butler, Natchez, July 31, 1962
Ralph B. Davis, Waynesboro, July 3, 1962
John W. D. Dicks, Vicksburg, March 5, 1963
Warren M. Dilworth, Jackson, February 15, 1963
Frank A. Donaldson, Jackson, March 18, 1963
Robert C. Eley, Moss Point, February 7, 1963
Lucien S. Gaudet, Natchez, July 4, 1962
William S. Harper, Laurel, September 23, 1962
James R. Hill, Corinth, March 24, 1963
Hugh N. Mayes, New Albany, January 30, 1963
John E. McDevitt, Vossburg, November 16, 1962
Edmund A. Melvin, Gulfport, September 15, 1962
Charles A. Pender, Kosciusko, December 28, 1962
Winston C. Pool, Cary, March 20, 1963
Benjamin B. Rader, Clarksdale, December 23, 1962
Joel A. Simpson, Jr., Wiggins, February 22, 1963
Murdock M. Snelling, Handsboro, October 11, 1962
John E. Tate, Ripley, December 16, 1962
Horace C. Watkins, Sr., Quitman, June 28, 1962
Robert E. Wilson, Greenwood, March 16, 1963

ACTION OF THE HOUSE OF DELEGATES

Without objection, Resolution No. 1 was acted upon without referral and was unanimously adopted by the House of Delegates standing in silent tribute.

RESOLUTION NO. 2, INFORMATION ON LOSS OF NARCOTICS STAMPS

Dr. Frank L. Ramsay: WHEREAS, There is need among public health and medical licensure authorities for information with respect to individuals whose federal narcotics stamps have been revoked or voluntarily surrendered, and

WHEREAS, A means for providing this service with such frequency and regularity as to assure timely receipt should be provided, now, therefore, be it

Resolved, That the Delegates to the American Medical Association be instructed to request that such information be furnished to executive officers of each state health department and medical licensure body upon appropriate authorization by administrative or legislative action as may be necessary.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

Discussion before your Reference Committee on this resolution brought out the fact that there is a question as to who can legally receive information from the Bureau of Narcotics, U. S. Treasury Department, regarding the loss of narcotics stamps.

Your Reference Committee concurs in the intent of this resolution and recommends its adoption with addition of the following:

"Resolved, That the Mississippi State Board of Health be encouraged to transmit such information to hospitals, component medical societies, and pharmacists on condition that the Bureau of Narcotics, U. S. Treasury Department, approves such transmittal."

Your Reference Committee further recommends that copies of this resolution be sent to each Mississippi Congressman and Senator and the Bureau of Narcotics, U. S. Treasury Department.

The report of the reference committee was adopted.

RESOLUTION NO. 3, APPROVAL OF VOLUNTARY HEALTH AGENCY

Dr. H. C. Ricks: WHEREAS, United Cerebral Palsy of Mississippi, Inc., has been organized and chartered as a corporation not for profit under the laws of the state of Mississippi, whose purpose it is to render service as a voluntary health agency concerned with care of cerebral palsy patients and the fostering of scientific research and professional and public education in this connection, and

WHEREAS, The Mississippi State Medical Association, upon application thereto, does from time to time extend its approval to such voluntary health agencies whose purposes, organization, and programs meet stated criteria, and

WHEREAS, Medical policy of United Cerebral Palsy of Mississippi, Inc., is and will be determined solely by physicians; the organization is governed under formal by-laws; full public accounting of funds received and expended is made, to include information as to source of receipt and purpose for which expended; and the organization desires to seek its goals of service in full consonance and accord with policies of the Mississippi State Medical Association, the laws of the state of Mississippi, and the legitimate needs of society; and has, through its authorized officers, made application for approval by the association, now, therefore, be it

Resolved, That the Mississippi State Medical Association approves the United Cerebral Palsy of Mississippi, Inc.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

In considering this resolution, it was pointed out to your Reference Committee that the Council on Medical Service is charged with recommending association approval of voluntary health agencies to this House of Delegates. Since the Council on Medical Service has not had the opportunity to consider the request of this voluntary health agency for approval by the Mississippi State Medical Association, your Reference Committee recommends that this resolution be referred to the Council for that purpose.

During discussion before your Reference Committee on Resolution No. 3, it was recommended that the Council on Medical Service review annually the programs of voluntary health agencies approved by this association and report its findings to this House of Delegates. Your Reference Committee wishes to associate itself with this recommendation.

The report of the reference committee was adopted.

RESOLUTION NO. 6, COURT ORDERED PRETRIAL PSYCHIATRIC EXAMINATION

Dr. Robert J. Moorhead: WHEREAS, The Sixth Amendment to the Constitution of the United States guarantees the accused "the right to a speedy and public trial by an impartial jury of the State and District wherein the crime shall have been committed," and

WHEREAS, Government or court ordered pretrial psychiatric examination, unless requested by the defendant and/or his legal representatives, constitutes a flagrant denial of constitutional rights, and

WHEREAS, Such pretrial psychiatric examination, regardless of the findings of such an examination, invariably jeopardizes the reputation of the accused, now, therefore, be it

Resolved, That the House of Delegates of the Mississippi State Medical Association in regular session, assembled in Biloxi, Mississippi, on May 16, 1963, is opposed to government or court ordered pretrial psychiatric examination except at the request of the accused or his legal representatives.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Your Reference Committee considered this resolution which states that "the Mississippi State Medical Association is opposed to government or court ordered pretrial psychiatric examination except at the request of the accused or his legal representatives." Your committee, while appreciating the intent of this resolution, is not sure of its applicability to federal and state law, both statutory and case, and, therefor, recommends that this resolution be not adopted, but resubmitted after clearance with state legal authorities.

The report of the reference committee was adopted.

RESOLUTION NO. 7, FEDERAL MEDICAL CARE FOR THE AGED

Dr. Robert J. Moorhead: WHEREAS, The King-Anderson bill (H.R. 3920 and S. 880, 1st Session, 88th Congress) proposes to furnish socialized hospitalization and nursing care for the recipients of Social Security, and

WHEREAS, The provisions of the bill would be financed through the Social Security system by raising both the ceiling of the taxable income and the tax rate, and

WHEREAS, The King-Anderson bill would constitute the initiation of compulsory national health insurance for one segment of the American public at the expense of every working citizen and

WHEREAS, Compulsory health insurance (socialized medicine) historically has led to the deterioration of medical care to the detriment of patients, and

WHEREAS, The King-Anderson bill would be a forerunner to the decline and eventual end of private health insurance, and

WHEREAS, Enactment of the King-Anderson measure would place Congress under the continuous pressure for the coverage to be extended by the simple process of removing the aged 65 limitation and thus lead to compulsory socialized medicine for the entire population, and

WHEREAS, Care of the aged—medical or otherwise—is and should be morally a responsibility of families and local communities, and

WHEREAS, Taking by force from some to give to others constitutes theft and as such cannot be condoned by moral people, now, therefore, be it

Resolved, That the House of Delegates of the Mississippi State Medical Association, in regular session assembled in Biloxi, Mississippi, on May 16, 1963, opposes H.R. 3920 and S. 880, and all similar legislation, and urges the members of the Senate and House of Representatives to vote against enactment.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Your Reference Committee considered this resolution dealing with the King-Anderson bill. Your committee concurs in this resolution reaffirming our opposition to these bills which would establish a system of compulsory medical care for the aged in this country.

During discussion of this resolution, it was pointed out that these bills are erroneously referred to by their proponents as Medicare. Medicare, as we know, is a program for dependents of armed services personnel. Your Reference Committee, therefore, recommends that these bills be called "fedicare" to properly associate their intent.

On motion by Dr. S. S. Kety, Picayune, second by Dr. M. Q. Ewing, Amory, the report was amended to require the furnishing of copies of the resolution to the Mississippi Congressional delegation. As amended, the report of the reference committee was adopted.

RESOLUTION NO. 8, RESTRICTION OF USE OF RADIOLOGICAL MACHINES AND MEDICINES

Dr. Wallace E. Calhoun, Jr.: WHEREAS, The practice of medicine has entered into the field of radiological exposure for many years with the rigid control that they feel should be imposed on such medical modalities, and

WHEREAS, The interest in radioactive exposure has increased by fall-out from atomic testing and from exposure to other radiological machines as may be employed by other than doctors of medicine and doctors of dentistry and their registered technicians, and

WHEREAS, The Mississippi State Health Department has been charged to police radiological equipment and the use of radioactive isotopes, now, therefore, be it

Resolved, That the Mississippi State Medical Association seek appropriate legislation to restrict the use of radiological machines for diagnostic and treatment use for human beings to doctors of medicine, doctors of dentistry, and their qualified technicians.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

(6) *Restriction of Use of Radiological Machines and Medicines, Resolution No. 8.* Your Reference Committee heard extended discussion on the use of x-ray machines by unqualified persons and the dangers involved in such use. Your Reference Committee recommends that this resolution be changed as follows:

> *"Resolved,* That the Mississippi State Medical Association seek appropriate legislation to restrict the use of radiological machines and medicines for diagnostic and treatment use for human beings to doctors of medicine, doctors of dentistry, qualified technicians, and others qualified by Mississippi law."

The report of the reference committee was adopted.

ADDITIONAL REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

There was lengthy discussion before your Reference Committee regarding Mississippi's Coroner-Ranger law. Your committee recommends that the Council on Legislation study the advisability of changing this law to provide that a qualified physician will be coroner in each county of the state.

The additional report of the reference committee was adopted.

SPECIAL ADDRESS

Dr. George M. Fister, Ogden, Utah, President of the American Medical Association, was escorted to the rostrum by a committee consisting of Drs. John G. Archer, J. P. Culpepper, Jr., and George E. Twente. Dr. Fister addressed the House of Delegates and his address will be published separately.

ADDITIONAL ACTIONS OF THE HOUSE OF DELEGATES

After reports of the Fraternal Delegates were heard, the President presented Mrs. A. T. Tatum, Petal, 1962-63 President of the Woman's Auxiliary to the Mississippi State Medical Association, and Mrs. Mal S. Riddell, Jr., Winona, the incumbent President, each addressing the House of Delegates.

OFFICIAL ATTENDANCE

The official attendance was announced as being 972 to include 603 physicians, 207 members of the Auxiliary, and 162 others, a new record for an annual session on the Gulf Coast.

REPORT OF THE REFERENCE COMMITTEE ON RULES AND ORDER OF BUSINESS

Conduct of Business. Your reference committee commends the Speaker and Vice Speaker for the outstanding manner in which they have conducted business before this House of Delegates. We believe that all members will wish to associate themselves in this commendation and an expression of appreciation to these officers.

Resolution. Your reference committee desires to offer the following resolution for consideration by this House of Delegates:

WHEREAS, the 95th Annual Session of the Mississippi State Medical Association has been conducted at Biloxi, Mississippi, during the period May 13-16, 1963, and

WHEREAS, the annual session has been most profitable and enjoyable for all who have been in attendance, now, therefore, be it

Resolved, That expressions of deep appreciation are made to the officers, Trustees, and Council on Scientific Assembly for the stimulating and useful scientific program; to the managements of all participating hotels, particularly to the Buena Vista, the headquarters hotel; to the press, radio, and television for coverage of our activities; to the gracious ladies of the Auxiliary who always contribute so substantially to our meetings; to the technical exhibitors and their professional service representatives; to our scientific exhibitors; to the distinguished members of the Seminar on Medicine and Religion; and to all who shared in the responsibilities of planning, organizing, and conducting this great annual session.

Your reference committee recommends the adoption of this resolution.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT OF THE REFERENCE COMMITTEE ON RULES AND ORDER OF BUSINESS

Your Reference Committee, on behalf of the entire House of Delegates, desires to commend the Southern Bell Telephone Company, especially the Gulfport and Jackson offices. It was through the work and interest of these offices that the special remote transmission hookup by which our President addressed the House on Monday, May 13, 1963, was made possible.

This was, indeed, a major technical and engineering accomplishment. We extend our appreciation to Mr. Moss of the Gulfport office and to his chief engineer, Mr. McCaleb, and their associates. The same measure of appreciation is extended to M. Jaquith and Mr. Rayner of the Jackson office.

This great organization acted promptly to our request, understood our problem, and made it possible for us to hear our President from his home at Collins.

The supplemental report of the reference committee was adopted.

REPORT OF THE ELECTION OF OFFICERS

President-elect: Omar Simmons, Newton
Vice Presidents: Byron A. Mayo, Drew; Clyde A. Watkins, Sanatorium; James T. Thompson, Moss Point
Editor: W. Moncure Dabney, Crystal Springs
Associate Editor: Dewitt Hamrick, Corinth
Delegate to AMA: J. P. Culpepper, Jr., Hattiesburg
Alternate Delegate to AMA: B. B. O'Mara, Biloxi

Board of Trustees: W. E. Moak, Richton, District 7; Everett H. Crawford, Tylertown, District 8; C. D. Taylor, Jr., Pass Christian, District 9

Council on Budget and Finance: George D. Purvis, Jackson

Council on Medical Education: Temple Ainsworth, Jackson

Council on Constitution and By-Laws: E. LeRoy Wilkins, Clarksdale

Council on Legislation: William E. Lotterhos, Jackson, District 5 (one year); Andrew J. Carroll, Jr., Hattiesburg, District 7; A. V. Beacham, Magnolia, District 8; Eldon L. Bolton, Biloxi, District 9

Judicial Council: Paul B. Brumby, Lexington, District 4; George H. Martin, Vicksburg, District 5; Omar Simmons, Newton, District 6

Council on Medical Service: George F. Archer, Greenville, District 1; Joseph B. Rogers, Oxford, District 2; M. Q. Ewing, Amory, District 3

Blue Cross-Blue Shield Directors: Lamar Arrington, Meridian; Walter H. Simmons, Jackson; W. N. Crowson, Clarksdale; Andrew K. Martinolich, Jr.; Bay St. Louis

Mississippi State Board of Health: Nominated for District 2, N. C. House, Batesville; Ashford H. Little, Oxford; B. S. Guyton, Oxford. Nominated for District 4, Joseph L. Guyton, Pontotoc; Thomas N. Braddock, Jr., West Point; S. Lamar Bailey, Kosciusko. Nominated for District 5, Lamar Arrington, Meridian; Guy T. Vise, Meridian; Joe S. Covington, Meridian.

Fraternal Delegates: To Alabama, W. T. Oakes, Amory; to Arkansas, C. G. Sutherland, Jackson; to Louisiana, Victor E. Landry, Lucedale; to Tennessee, Stanley A. Hill, Corinth

INTRODUCTION OF AMENDMENT TO THE BY-LAWS

Dr. Lawrence W. Long, Jackson, introduced the following amendment to the By-Laws:

Amend Section 2, Chapter V, by deleting the first sentence thereof and substituting therefor "The House of Delegates shall meet annually on the first day of the annual session of the association."

The Speaker announced that the amendment will lie on the table until the 96th Annual Session.

CLOSING CEREMONIES

There being no further business, the Speaker returned the gavel to the President, Dr. Crenshaw, who had been able to join the annual session, and who addressed his appreciation and commendation of the general officers, Board of Trustees, councils, and others to the House. The Oath of Office was administered to Dr. John G. Archer, the President-elect, by Dr. H. H. McClanahan, Jr., Chairman of the Board of Trustees, after which Dr. Archer addressed the House.

Mr. Wade Hollowell, president of the First National Bank of Greenville and president of Blue Cross-Blue Shield, representing the citizens of Greenville, the home of the new President, made a presentation to Dr. Archer. Dr. James Grant Thompson presented the Thompson Memorial Past President's Pin to Dr. Crenshaw and Dr. Lawrence W. Long presented the Past President's Certificate.

The House of Delegates was adjourned *sine die* at 5:01 o'clock in the afternoon, May 16, 1963.

DELIVERANCE DAY

Chamber of Commerce President Edwin P. Neilan facetiously calls July 9 "Deliverance Day"—because on that day, 52 per cent of the calendar year has passed and corporations presumably begin working for themselves—and says he won't be satisfied until it's moved back at least to June 21, which represents 47 per cent of the year.



The President Speaking

'A Vote of Confidence'

JOHN G. ARCHER, M.D.
Greenville, Mississippi

NO SINGLE SEGMENT of the health care team has endured more slings and arrows than the American pharmaceutical industry. Long before the thalidomide tragedy, political liberals zeroed in on the drug makers as the favorite *raison d'etre* for all the economic, pharmacologic, and related ills—real or fancied—of modern healing. A tough drug control law was enacted by the Congress and even tougher FDA regulations were imposed upon the manufacturers.

Now is a good time to take a good look at this vital industry, to examine objectively facts about it which are matters of public record, and to see what's with the drug maker, so often portrayed as a modern Diamond Jim Brady with a bottle of dubious elixir in one hand and a cash register in the other. Of the millions of physicians' prescriptions filled last year, six out of 10 cost $3 or less and only one out of 100 cost $10 or more. The mean retail price to the patient was about $3.25. Since 1949, the wholesale price of ever-better drugs has *declined* over 10 per cent, while all other wholesale prices of commodities have risen almost 27 per cent.

No other American industry even approaches pharmaceutical manufacturing in proportion of research personnel or private expenditures on research activity. For example, research in all private American industry is 44 per cent privately financed and 56 per cent government funds. Aeronautical research is 85 per cent government financed, and the electronics industry is close behind with 69 per cent federal research support. In sharp contrast, the American pharmaceutical industry's research effort is *98 per cent privately financed* and only one compound out of 2,500 investigated and studied ever reaches the physician's office and pharmacist's shelves!

Nobody has to be reminded what modern drugs have done to change mortality patterns and physicians are the first to appreciate that safety and efficacy are the pharmaceutical manufacturer's first concern. Our drugs are as safe as practical modern science can make them and their successful use in the hands of the physician speaks for itself. The nation is a little tardy in awarding this indispensable member of the health team the vote of confidence it has clearly earned. ★★★

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EDITORIALS

Medicine and the Law: A New Era of Understanding

The principal objective of the medical and legal professions is to render service to humanity with full respect for the dignity of man. Physicians are concerned with conservation of health and life, and attorneys, with the securing of justice in an orderly society of law.

I

So begins a new era of understanding between physicians and attorneys in Mississippi with the formal adoption by their respective professional associations of an interprofessional code. The brief document, approved by the state medical association's 95th Annual Session and the recent Mississippi State Bar convention, establishes guidelines by defining responsibilities of physicians, of attorneys, and joint responsibilities of each to the other. The keystone of the code is the common focus of the two professions upon seeking always the best interests of those whom they serve.

Both the state bar and medical association are agreed that provisions of the code are not laws but suggested guides for members of the two professional bodies, subject to medical and legal ethics. Adoption of the code is an acknowledgement by physicians and attorneys of the interrelationship between medicine and the law, of obligations of the practitioners to those whom they serve, and of their obligations to each other.

Joint obligations include areas of interprofessional courtesy, the interests of patients and clients, and possible interprofessional disputes as well as matters of professional propriety. The code recognizes that the physician and the attorney are essential to society, that each is a learned and honorable individual who is motivated by honorable aims, and that each desires to uphold the dignity, integrity, and respect of the other.

II

In the code, physicians recognize their obligation to serve as witnesses in matters of controversy arising out of the injury or illness of patients. They recognize the necessity for preparing reports and medical information, upon reasonable notice of need where circumstances of legality and propriety prevail. The furnishing of medical testimony is a further obligation, with the stated purpose of enlightening rather than impressing or prejudicing the court. The necessity of the pretrial conference between physician and attorney is emphasized.

Attorneys accept obligations to reciprocate the physician's promptness, objectivity, and respect during conferences and in the courtroom. They recognize that while the conduct of judicial proceedings cannot depend upon individual convenience, arrangement for a physician's appearance as a witness should take into account professional demands upon his time. Accordingly, the attorney should not ordinarily cause issue of a subpoena without prior notice to the doctor. And since rules of evidence afford ample opportunity

to test the qualification, credibility, and competence of a medical witness, attorneys agree that it is improper and unnecessary to abuse the physician who is giving testimony.

Requests for medical information should be in writing and both physician and attorney recognize their entitlement to receive fair and reasonable compensation for professional services rendered.

III

The genesis of the Mississippi code emerged in a climate of mutuality with conferences between the presidents of the two professional organizations more than a year ago. These leaders, then-presidents Dr. C. P. Crenshaw of Collins and Hon. C. Sidney Carlton of Sumner, arranged for appointment of a joint committee of six with equal representation of medicine and the bar.

Committee studies and discussions were searching, lively, and constructive. By the spring of the year, a code had been hammered out and approved to a word by the three physicians and their attorney counterparts. Both the association's Board of Trustees and the bar's Commissioners approved the proposed document prior to its subsequent adoption by the two annual sessions.

The accomplishment is significant, not merely to the two professions, but to those whom they serve, their patients and clients. The candid words of the House of Delegates seem to make up the most appropriate summary of the entire project: "We feel that it is a constructive beginning for better relations between the professions of medicine and the law." To this expression most physicians and attorneys have added hearty concurrence.—R.B.K.

Creeping Numeralism

Alfred North Whitehead could have known nothing about the U. S. Internal Revenue Service, the telephone company, or the Post Office Department when he said that "art of progress is to preserve order amid change and to preserve change amid order." But the fact is that Mr. Whitehead's observation didn't take into account this business of numbers which has gotten to be such an integral part of our lives. In fact, even the numbers are changing.

Such great American landmarks as PEnnsylvania 6-5000 and WHitehall 4-1500 have been replaced by Area Code 312, 527-1500 and the like. By the end of the year, every American taxpayer will be a bunch of digits, Arabic style. So, surrounded by numbered members of society, we are unwitting victims of a subtle take-over. We live in numbered houses on numbered streets, fill out numbered forms, drive numbered automobiles, wear numbered suit and dress sizes, adorn the gentle sex with Chanel No. 5, eat beans from a number three can, all on a numbered day of a numbered year.

Let's face it, fellow digits, we are caught in a morass of creeping numeralism.

Comes now the Post Office Department with the new ZIP (zone improvement program) codes. It's a five digit affair replacing the old postal zone number, and it should be placed after the city and state on your return address. So when writing your MSMA, include our ZIP code which is 39216 to speed delivery of your mail.

And, take heart, because there is a bright side in our arithmetic future: Brand "X" will soon be a thing of the past and those mystifying lettered government agencies may go, too. So be of good 983716, and don't let the 375's get you down!—R.B.K.



"I dread these times when he's all caught up."

Moving With the Times

English common law, a rich heritage upon which American jurisprudence has drawn freely, is still a source of wonder to most of us. Only recently have Canadian courts, under such laws, recognized that privileged communication exists between physician and patient.

In a civil divorce action, a psychiatrist who had been treating the wife was called upon by the husband to testify as to what the wife had told him during the course of the treatment. The physician refused and the presiding judge excused him from the witness stand, thereby establishing the privilege under his common law authority. Previously, the only privilege so recognized was the communication between lawyer and client.

The opinion of Mr. Justice Stewart who made the ruling is interesting: "I have regarded this for many years to be quite shocking," he said. "It is the genius of the common law to move with the times. When it (the doctrine of privileged communications) was first promulgated, there was no such thing as a psychiatrist; a surgeon was a barber; a physician, little more than a herbalist. Today the situation is quite otherwise."

American physicians will be glad to know our northern neighbors are moving with the times—in terms of typical British understatement! —R.B.K.

LETTERS

SIRS: My sincere compliments on your April editorial ("Blueprint for Bankruptcy of a Nation and Its Health"). I hope it will be reprinted elsewhere.

MAL RUMPH, M.D.
FT. WORTH, TEXAS

And we're honored to say that it has been reprinted—in the Nebraska State Medical Journal—and has been widely circulated in New Jersey. —The Editors.

SIRS: I was delighted to read the editorial ("The Wall Street Journal and Narcotism") in the June issue of the JOURNAL, a copy of which was sent to me by District Supervisor Ernest M. Gentry.

We have been forced to defend our policy regarding the narcotic problem and it is good to know that we have the support of the Mississippi State Medical Association.

If you have not already sent a copy of the editorial to the *Wall Street Journal,* may I have your permission to do so? If you have no objection, I would like to send a copy to other persons where it may do some good.

HENRY L. GIORDANO
COMMISSIONER OF NARCOTICS
WASHINGTON 25, D. C.

NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

GIBSON, JAMES ADELL, Jackson. Born Mendenhall, Miss., Sept. 1, 1925; M.D., Harvard Medical School, Boston, Mass., 1954; interned Medical Center, Columbus, Ga., one year; residencies, VA Hospital, Hines, Ill., one year, psychiatry; VA Hospital, Downey, Ill., one year, psychiatry; Passavant Memorial Hospital, Chicago, Ill., six months, psychiatry; fellowship, Institute for Juvenile Research, Chicago, Ill., two years, child psychiatry; member, American Psychiatric Association; elected April 4, 1963, by Central Medical Society.

NASSAR, JAMIL GEORGE, Jackson. Born Souk El Gharb, Lebanon, Dec. 25, 1920; M.D., American University of Beirut, Lebanon, 1948; interned American University Hospital, Beirut, Lebanon, one year; EENT residency, American University Hospital, Beirut, Lebanon, two years; ophthalmology residency, University of Pennsylvania School of Medicine, Philadelphia, one year; opthalmology residency, University of Mississippi School of Medicine, Jackson, one year; neuro-ophthalmology fellowship, University of Mississippi School of Medicine, Jackson, one year; presently an instructor, Department of Surgery, University of Mississippi School of Medicine, Jackson; elected June 4, 1963, by Central Medical Society.

PETTIS, JAMES LEIGHTON, JR., Tupelo. Born Oxford, Miss., June 14, 1933; M.D., University of Tennessee College of Medicine, Memphis, 1958; interned John Gaston Hospital, Memphis, Tenn., one year; ophthalmology residency, Tulane University School of Medicine, New Orleans, La., one year; ophthalmology residency, University of Mis-

sissippi School of Medicine, Jackson, two years; elected June 11, 1963, by Northeast Mississippi Medical Society.

POTTER, WILLIAM DANIEL, III, Madison. Born Clinton, Miss., Feb. 12, 1929; M.D., University of Mississippi School of Medicine, Jackson, 1961; interned Mobile General Hospital, Ala., one year; elected June 4, 1963, by Central Medical Society.



WILLIAM DENMAN BRIDGES, who completed his internship at Mid-State Baptist Hospital in Nashville, Tenn., has opened his practice in Liberty. Dr. Dennis is a graduate of the University of Mississippi School of Medicine.

RAYMOND W. BROWNING has opened his practice of surgery in Greenwood. A graduate of the Tulane University School of Medicine, Dr. Browning completed his internship at Charity Hospital in New Orleans. He conducted a general practice in Centreville, Miss., for five years, closing his practice to take a residency in surgery at the University of Arkansas School of Medicine. Dr. Browning served on the faculty of the University of Arkansas School of Medicine during the past year.

WALTER T. COLBERT of Natchez has announced the association of JAMES G. KRESTENSEN in the practice of radiology. Dr. Krestensen received his medical degree from the University of Texas Southwestern Medical School and interned at the University Hospital in Jackson. He began his practice of medicine in 1956 in Washington, returning to the university in 1960 for a residency in radiology.

WILFRED Q. COLE, who heads the cystic fibrosis care, research, and teaching center at the University of Mississippi School of Medicine, participated in a June Cystic Fibrosis Conference at the University of Colorado Medical Center in Denver. Physicians and scientists from 31 units throughout the country gathered for the three-day discussion of recent developments in diagnosis, therapy, and research.

FRANK G. GRUICH of Biloxi has announced the association of WARREN C. PLAUCHÉ in the practice of obstetrics and gynecology.

G. SWINK HICKS and ALLEN M. READ have announced the association of GERALD L. FORET in the Natchez Polyclinic.

JOE G. MCKINNON of Hattiesburg and GUY T. GILLESPIE of Jackson have been named to the program planning committee for the Sept. 19 annual meeting of the Mississippi Division, American Cancer Society. Dr. McKinnon is chairman of the state service committee and past president of the division. Dr. Gillespie is president of the Hinds County Unit of ACS. Dr. Forrest G. Bratley, Jackson pathologist, was named to the awards committee for the annual meeting. The appointments were made by Dr. R. H. Fenstermacher, division president.

JOHN MURRELL MCRAE, JR. has announced the opening of his office in Greenville for the practice of surgery. He will be associated with Dr. M. A. Creekmore. A graduate of the Harvard Medical School, Dr. McRae completed his internship and residency at the University of Mississippi School of Medicine.

PAUL H. MOORE is now associated with SAM LEVI in the practice of radiology in Pascagoula. Dr. Moore was graduated from the University of Mississippi School of Medicine in 1959 and served his internship at the Memorial Hospital of Chatham County in Savannah, Ga. He has recently completed a three year residency in radiology at the University of Florida Teaching Hospital.

JAMES OVERBY has announced his association with ELMO GABBERT in the practice of medicine and surgery in Bruce. Dr. Overby is a graduate of the University of Mississippi School of Medicine and completed his internship at the Mississippi Baptist Hospital in Jackson.

GEORGE D. PURVIS and THOMAS C. TURNER of Jackson have announced the association of WILLIAM BURKE THOMPSON in the practice of orthopedic surgery. Dr. Thompson received his medical degree from the University of Mississippi School of Medicine in 1958. He completed his internship at the university and his residency at the university and the Mississippi Baptist Hospital.

MARION L. SIGREST has joined the staff of the Physicians and Surgeons Clinic in Yazoo City. A graduate of the University of Mississippi School of Medicine, Dr. Sigrest completed his internship at the Memorial Hospital in Savannah, Ga.

Book Reviews

Skin Surgery. By Ervin Epstein, M.D., Associate Clinical Professor of Dermatology, University of California Medical School, and Chief of Dermatology and Syphilology, Highland-Alameda County Hospital. 2nd edition. 339 pages with 472 illustrations. Philadelphia: Lea and Febiger, 1962. $10.00.

This book, edited by Dr. Epstein, is a compilation of various subjects by different authors. Two or three chapters are devoted to the office setup for skin surgery. This includes both scalpel and scissors surgery and hyfrecator type surgery.

Two chapters, written by plastic surgeons, are well done and quite a large field is well covered in a short space. Many basic principles of plastic surgery are discussed but, of course, no great detail is given. Many good pointers are presented that would greatly aid one who is doing general practice, general surgery, or dermatology, but some procedures are described that would fall strictly in the realm of the plastic surgeon.

The chapter on treatment of advanced cancer is well done and gives an idea of what can and must be done in such a disease.

Electrosurgery, in its various forms, is described in great detail. This is undoubtedly an excellent method of treating small benign lesions and small epitheliomas. However, I personally feel that surgical excision of even small malignancies of the face and of large lesions anywhere will give a better cosmetic result. The pathologist can fix, cut, and examine the specimen in its original surroundings and can therefore estimate the adequacy of excision much better than he could with bits of curettage material, some of which have been burned. Healing is complete in a matter of a few days when a wound is sutured primarily or even when closed by small rotational flaps or small skin grafts. These are relatively minor out-patient procedures and do not incapacitate the patient for any length of time. To leave a wound of several centimeters in diameter to slough, granulate, and heal by secondary intention requires six to ten weeks of frequent dressings and frequent visits to the office.

I feel the same way about "chemosurgery" for cancer, especially in epidermoid carcinoma. Excision of a cancer and immediate frozen section of any suspicious areas seems logical. If the excision in inadequate, then and there further excision can be done. Immediate reconstruction can then be done by primary repair, flaps, or grafts.

Dermabrasion is dealt with quite well. However, we prefer to use local anesthesia containing adrenalin. This diminishes the amount of bleeding. Freon is used to harden the softer areas of the face and facilititates the sanding. Heavy sedation is also used, and this is all done on an out-patient basis or with the patient staying over-night in the hospital. Our patients are not usually stoic enough to withstand dermabrasion of the entire face with no anesthesia other than Freon.

Superficial chemosurgery, or "face peeling," is described in detail. We have not had any personal experience as yet, but I do feel that it is a good adjunct to surgical face lifting. Medical tattooing also falls in the category of procedures that I have not done personally but I do believe that when judiciously used it is a good procedure.

Though I personally disagree with some of these methods of treatment, I do feel that the subject matter is well presented and the book can be an asset to anyone who deals with skin lesions.

H. C. Ethridge, M.D.

Synopsis of Obstetrics. By Charles E. McLennan, M.D., Professor of Obstetrics and Gynecology, Stanford University School of Medicine. Sixth edition. 464 pages with 157 illustrations. St. Louis: The C. V. Mosby Company, 1962. $6.75.

Dr. McLennan has succeeded in a fine way to bring improvements to this volume over the two previous editions which he prepared and the first several editions by the original author, the late Jennings C. Litzenberg of the University of Minnesota. The present edition continues in the very acceptable tradition of previous ones with concise, pithy statements arranged in outline form which certainly do arouse attention. This arrangement stimulates interest as one reads this volume. The author has rearranged chapters in a more orderly sequence, and related subject matter, previously scattered, has been grouped together. For instance, postpartum hemorrhage is presented with

other accidents of the third stage of labor instead of with antepartum bleeding.

One dictionary definition of the word synopsis is a general view of a whole subject, a summary. This book is certainly that. From the first chapter on ovulation and fertilization through the final chapter on obstetric surgery it is full of facts presented in a most interesting manner. Two chapters in particular impressed me—the chapter on prenatal care and the chapter on medical disorders.

The chapter on prenatal care with emphasis on its various aspects is well worth extra study. I agree completely with the author when he states: "The proper care of the prospective mother during the entire period of pregnancy is quite as important in its health and lifesaving function as expert care during the delivery. During gestation the step from health to ill health is a short one." Although prenatal care has improved in recent decades, many phases of it can still be improved upon.

The chapter on medical disorders complicating pregnancy presents a challenge to all of us to be ever aware of the possible effects of infectious diseases and other medical disorders on pregnancy and to alleviate these effects wherever possible. It may be well to emphasize more the effects of certain drugs, since the medical profession is bombarded continually with so many new drugs to prescribe.

A book of this type with its excellent illustrations and the orderly and interesting manner of presentation of the material will no doubt continue to enjoy wide acceptance by students, interns, nurses, residents, and the busy practitioner of obstetrics.

FRANK L. BUTLER, M.D.

Journal Reviews

Barber, Theodore Xenophon: Toward A Theory of Hypnosis: Posthypnotic Behavior, AMA Arch. Gen. Psychiat. 7:321 (Nov.) 1962.

In view of the recent surge of interest in the use of medical hypnosis, this is a rather timely article which provides food for thought in the interesting implications it contains about the nature of hypnosis. Two questions are posed as follows: 1. Are suggestions given under hypnosis or trance more effective than suggestions given under nontrance conditions in producing amnesia for experimental events and in controlling posthypnotic or postexperimental behavior? and 2. If such suggestions are more effective with hypnotized subjects, is this effect due to the presence of the hypnotic trance or is it produced by other factors in the experimental design and absence of controls?

This is followed by a number of experimental studies supporting the thesis that formal trance induction is not necessary to elicit responses to posthypnotic suggestion. The percentage of nonhypnotized subjects responding was about the same as the hypnotized subjects. Evidence suggests that even quite complicated suggestions may be executed if the subject is for some reason especially motivated to perform well or if there is a close relationship with the experimenter.

Unconscious compulsion of the subject to carry out the posthypnotic suggestion is questioned and several examples given which suggest that at least some subjects quite consciously strive to execute the suggestion and when unable to comply in the manner intended, try to provide an acceptable substitute. An hypothesis is offered that individuals having a "high need for deference" will comply with the suggestion, whether hypnotized or not. The question of whether there is a recurrence of the trance state in connection with carrying out the suggestions is considered, and it is concluded that the conditions set forth in the experimental situation determine this—in effect, it depends on whether the subject thinks this is expected or not.

The lack of awareness of motivation for the posthypnotic suggested action and amnesia for the suggestion seem also to be determined by the specific experimental situation, these being shown or not depending on what the experimenter indicates as his expectations. Amnesia for the events of the hypnotic session is examined and the evidence suggests that the forgetting of trance events may not actually occur, but rather the subject has an unwillingness to verbalize the trance events. This is supported by indirect testing methods.

The final paragraph in the paper summarizes the conclusion as follows: The concept of trance or hypnosis is unnecessary to explain posthypnotic amnesia and posthypnotic behavior. The data reviewed appear to indicate that the instrumental factors in producing these effects include: (a) direct suggestions—to show amnesia and to perform posthypnotic or postexperimental behaviors—which are given (b) to a subject who is motivated to perform well on the experimental tasks by (c) a prestigeful person with whom the subject has a friendly or close relationship.

L. C. HANES, M.D.

Construction Begun on Hinds General Hospital; Completion of 221-Bed Facility Scheduled for 1965

Groundbreaking ceremonies were conducted for the 221-bed Hinds General Hospital on July 9. To be built in South Jackson at the Raymond Road at Robinson Road, the facility is expected to be completed in two years.

Construction contracts totaling $3,226,724 were awarded by the Hinds County Board of Supervisors during the first week in July. The board said the contracts went to: general contract, Southeastern Construction Company, $2,043,500; mechanical, South Central Heating and Plumbing Company, $734,688; electric, Drake Electric Company, $261,261; elevators and dumbwaiters, Dover Elevator Company, $94,555; kitchen equipment, Commercial Kitchens, Inc., $92,720. All were low bidders in their categories.



Hinds County Supervisor Dan Ferguson, second from left, takes up the first shovel of dirt during groundbreaking ceremonies for the 221-bed Hinds General Hospital to be built in South Jackson. Other principals at the ceremony were (left to right) Dr. Albert L. Gore, member of the Medical Advisory Committee; Fred Hoerner, Hospital Board member; Supervisor L. J. Beasley, fifth district; Mrs. E. F. Ragan, second district, and Tom Virden, first district.

Construction cost of the new facility has been provided by a country-approved bond issue. No federal funds are to be used. The building as planned will contain 121,000 square feet, arranged on four floors, according to Poole Noel chairman of the Building Committee.

Members of the Medical Advisory Committee for the Hinds General Hospital are Dr. Lawrence W. Long, chairman; George Purvis, vice chairman; Albert Gore, Charles Wright, William Featherston, Bob Henderson, and Willard Boggan.

Hospital Association Hears Legal Authorities at July Meet

Meeting under the theme "Hospital Law—Its Impact and Importance," the Mississippi Hospital Association heard nine principal speakers during its July 15-17 annual meeting in Biloxi.

The opening speakers, John H. Fox, Jr., professor of law, University of Mississippi, and Jay H. Hedgepeth of Jackson, general counsel for the association, presented discussions pertinent to both trustees and administrators, placing emphasis on medical records and state statutes.

Among national authorities present was John F. Horty, director, Health Law Center, University of Pittsburgh. His presentations centered on torts common to hospitals and the use of consent forms.

John W. Whitten of Sumner, attorney for the Tallahatchie General Hospital and William H. Bizzell of Cleveland, chancellor of the seventh district, led discussions on hospital revenue.

The problem of drugs in hospitals was explored by a panel headed by Dr. A. L. Gray, executive officer, Mississippi State Board of Health. Panel members included E. E. Cammack of Jackson, secretary of the Mississippi State Board of Pharmacy, Delos H. Burks of Jackson, assistant attorney general, and Ernest M. Gentry, district supervisor, Bureau of Narcotics, U. S. Treasury Department, Dallas, Texas.

Meeting concurrently with the Mississippi Hospital Association were four associated groups including the MHA Council on Auxiliaries, the Mississippi Association of Medical Record Librarians, the Mississippi Chapter, American Association of Hospital Accountants, and the Mississippi Association of Hospital Governing Boards. Rowland B. Kennedy, MSMA executive secretary, was the keynote speaker for the MHA Council on Auxiliaries.

UMC Adds Two to Faculty, Promotes Five

Two new members have been added to the faculty of the University of Mississippi School of Medicine.

Dr. Godfrey Edward Arnold has been named an associate professor of surgery (otolaryngology) effective July 1. Dr. Arnold comes from New York where he served as director of research at the National Hospital for Speech Disorders and at the New York Eye and Ear Infirmary. He is a graduate of the University of Vienna Medical School.

Dr. Robert B. Thompson was appointed assistant professor of clinical laboratory sciences in April. He helds his medical degree from the University of Western Ontario School of Medicine and completed his residency in pathology at Victoria Hospital, Mt. Auburn Hospital, Cambridge, Mass., and the Medical College of Georgia.

Recent promotions include Dr. Watts R. Webb who was elevated from associate professor to professor of surgery on July 1. Promoted from assistant to associate professor in July were Dr. Elizabeth Dowdy, anesthesiology, and Dr. Arthur Briggs, pharmacology. Dr. Travis Richardson and Dr. H. L. Stone, physiology-biophysics, were promoted from instructor to assistant professor.

Dr. Landry Reappointed To Mental Institution Board

Dr. Victor E. Landry of Lucedale has been appointed to a six-year term as a member of the Board of Trustees of Mental Institutions by Governor Ross R. Barnett. His tenure will continue until March of 1969.

Dr. Landry's initial appointment to the board was received in August of 1962 when he was named to serve the unexpired term of Dr. J. K. Avent of Grenada who resigned. During 1962-63, Dr. Landry served as vice president of the Mississippi State Medical Association.

Other members of the Board of Trustees of Mental Institutions who oversee the operation of facilities at Whitfield, Meridian, and Ellisville are Thomas Alewine, Brandon, chairman; Lester Clark, Hattiesburg, vice chairman; Dr. James Grant Thompson, Jackson; and Sam Long, Shelby. Seth Hudspeth of Jackson is executive secretary of the board.

Two University Physicians Receive NIH Research Awards

Dr. Roger Arhelger, instructor in pathology, and Dr. Glenn Gentry, assistant professor of microbiology, at the University of Mississippi School of Medicine in Jackson received NIH Research Career Development Awards in May.

Dr. Arhelger has his medical degree from the University of Minnesota and took his pathology residency at the University of Mississippi where his work deals primarily with the evolution of vascular diseases and the methods whereby materials such as colloidal substances, antigen or antibody or combinations, are able to penetrate into or through the vessel walls.

Dr. Gentry got his Ph.D. in microbiology from the University of Mississippi in 1960, followed by a two-year postdoctoral fellowship in oncology at the University of Wisconsin. His research interest is with nucleic acid biosynthesis in the virus-infected mammalian cell.

Doctor's Role in Determining Disability Outlined

During the next 12 months, eight thousand Mississippians will file claims for disability insurance benefits under the Social Security Act.

Judging from past records, about 63 per cent of these will be found disabled. They will join the more than 10,470 disabled Mississippians and 10,522 of their dependents who are currently drawing social security disability benefits at a rate of 1½ million dollars a month.

Within the next year, predicts E. P. Rawson, supervisor of the Disability Determination Unit, Vocational Rehabilitation Division, State Department of Education, almost every practicing physician in Mississippi will be asked by a patient to furnish medical evidence in support of a disability claim. Last year about 13,000 medical reports were submitted to the Social Security Administration on behalf of Mississippi applicants. The cooperation of Mississippi physicians in providing needed medical data has been indispensable in administering this program, says Mr. Rawson.

The Disability Determination Unit, which Mr. Rawson heads, is responsible for the evaluation of all Mississippi disability applications. Reviewing is done by a two-man team consisting of a physician and a disability evaluator. All state determinations are further reviewed by professional personnel, including physicians, in the Baltimore headquarters of the Social Security Administration.

In a recent communication to MSMA, Mr. Rawson pointed out these important points about the Social Security disability program:

1. To qualify for disability benefits, the applicant must have a physical or mental impairment which prevents him from doing any kind of substantial gainful activity. A person who is prevented by an impairment from doing his accustomed work, but who has the capacity for other substantial work, considering his educational and vocational background, cannot be found disabled under the law.

2. The injury or illness must be demonstrable through the diagnostic techniques of medicine. It must have prevented work for six months and must be expected to be of long-continued and indefinite duration despite therapy.

3. In addition to meeting the medical requirements, a worker must be insured, i.e., he must have worked under social security for five years out of the ten years before becoming disabled.

4. Each claimant must furnish medical evidence in support of his claim. However, if additional evidence is needed which is not available from the claimant's medical sources, the evaluating physician in the state agency will authorize the purchase, at government expense, of independent



"What are the alleged complaints?"

consultative examinations and special tests from private physicians.

5. To evaluate the functional limitation caused by impairments, the state agency physician needs the same kind of history, physical findings, and laboratory data as the attending physician requires in making his diagnosis and planning treatment. Certain medical facts, however, have greater relevance to physical capacity than to diagnosis and therapy. For example, the results of a ventilatory study or of a calculated oxygen-consuming capacity procedure are more significant to physical capacity evaluation that to diagnosis.

6. Medical reports should include basic clinical and laboratory data as well as the physician's diagnostic, prognostic, and therapeutic conclusions. It should give sufficient history to determine the date of onset and course of the disease. Of special importance is information about how the impairment affects the patient's ability to perform the physical and mental functions needed for work, i.e., walking, stooping, seeing, hearing, speaking.

In conclusion, Mr. Rawson pointed out that specificity is perhaps the key to a useful medical report. He noted that about one out of every three Mississippians awarded disability insurance benefits has a primary diagnosis of cardiovascular diseases. In describing these conditions, he said, physicians should not depend on such general terms as "mild," "moderate," or "severe," but should give specific data such as cardiac size as shown by P.M.I. and x-ray, serial blood pressure readings, and E.K.G. descriptions and findings.

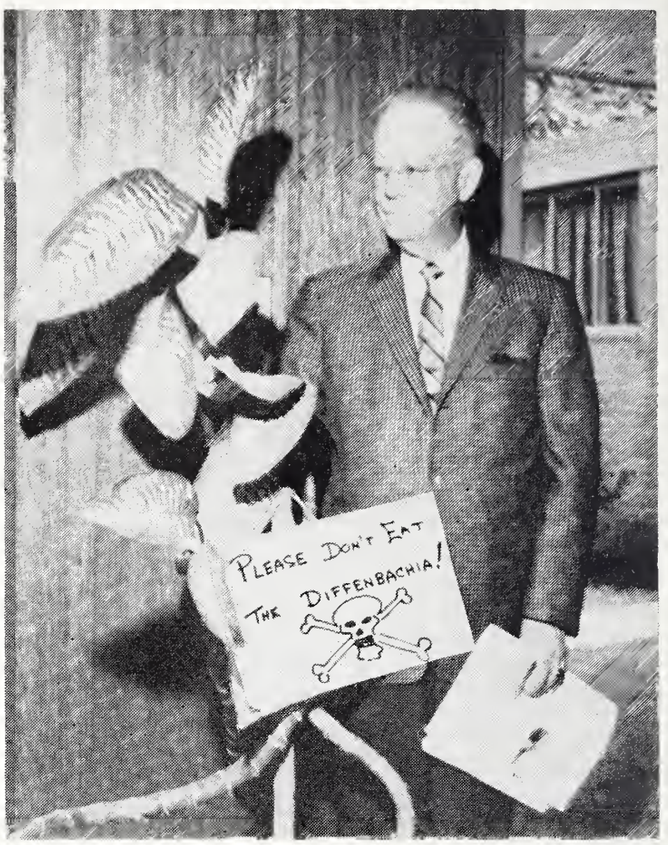
Mr. Rawson said that the reports received from Mississippi physicians indicate that "we are well on the way to establishing a community of understanding between the attending physician and the administrative agency as to what is required to evaluate functional capacity." Physicians may at any time obtain further information from the Disability Determination Unit, he said.

JAMA Article Puts MSMA Plant in Ill Repute

"Please don't eat the Dieffenbachia" warns a sign now hanging from one of the pot plants in the MSMA foyer.

Reading of the *Dieffenbachia's* toxicity in the June 29 *Journal of the American Medical Association,* the MSMA staff decided it was high time the public was cautioned of the seven-year-old plant's ill effects.

In an article entitled "Toxicity of the Common Houseplant Dieffenbachia: Report of a Case" (J.A.M.A. 184:1047), Drs. George Drach and Walter H. Maloney of Cleveland note that the toxic manifestations produced by oral contact with the *Dieffenbachia* can be alarmingly severe.



Dr. John G. Archer, MSMA president, inspects the now ill-reputed Dieffenbachia and its sign. A copy of the incriminating JAMA article is in his left hand.

Since the *Dieffenbachia* (*D. Sequine* or "dumb cane") is one of the most popular decorative pot plants, members of the species may be found in many public buildings and private homes. Consequently, the chances of a child or an adult unknowingly biting or tasting the leaves is quite high. The MSMA plant was a gift at the time of the headquarters building dedication.

Authors Drach and Maloney note that the severe corrosive burns which occur after ingestions of parts of the plant are due to the presence of calcium oxalate and certain unidentified glycosides. The stomach and esophagus may also be severely corroded if these toxic components are swallowed, they write. Systemic complications

may include bradypnea, stridor, respiratory failure, bradycardia, muscle twitching, cramps, vomiting, diarrhea, and hypotension.

Treatment, conclude the authors, is primarily symptomatic and supportive and includes adequate analgesia, protection of the mucosa, and treatment of hypocalcemia.

Their case report involves a 40-year-old woman who suffered severe oral lesions after biting into the stalk of a *Dieffenbachia*. The lesions were treated for ten days and showed a healing pattern characteristic of a caustic burn.

Dr. John Archer, MSMA president, was in the office for a conference last week and inspected the ill-reputed *Dieffenbachia*. After looking over the J.A.M.A. article, he noted that only one question was left unanswered. "Why in the name of caution would anyone over five bite a *Dieffenbachia* in the first place," he said.

NJ Medical Society Control Of Health Plans Struck Down

In a recent decision the New Jersey Supreme Court declared unconstitutional a portion of a state law that gives the state medical society power to approve or veto group medical-surgical plans.

The decision may pave the way for new competition among medical insurance plans in New Jersey. It may also provide a precedent for other states with similar laws giving medical societies power to restrict insurance plans.

At least a dozen states besides New Jersey have laws giving state medical societies varying degrees of power to approve medical plans or setting minimum percentages of doctors who must agree to participate in the group plans. New Jersey, Georgia, and Tennessee have the most restrictive laws, but other states include New Hampshire, South Carolina, Iowa, Kentucky, Montana, South Dakota, Alabama, Pennsylvania, California, Kansas, and Virginia. Under Mississippi law, group medical-surgical plans, such as the Mississippi Hospital and Medical Service, are chartered and regulated by the Insurance Commission.

Prior to the Supreme Court decision, the New Jersey State Medical Society had approved only one medical-surgical plan, that of Blue Shield, which the society sponsored. Eighteen of New Jersey Blue Shield's 23 trustees are doctors. The New Jersey court test was initiated by Group Health Insurance of New Jersey, a would-be competitor of Blue Shield.

The court decision pertains to those plans that seek to enroll doctors and contract with them to accept predetermined fees when treating subscribers of the group medical plans. It doesn't directly affect commercial health insurance plans, which generally pay benefits to the subscriber and don't enroll doctors.

The New Jersey Supreme Court deferred a decision on restriction of the state law. The law requires that a medical-surgical plan must have 51 per cent of doctors in a county as member physicians if the plan is to be approved. The court ordered further hearings to determine if this provision is also unconstitutional.

In striking down the right of the state medical society to approve medical-surgical plans, the court, in a 7-0 decision, said, "We think that such a power to restrict, or indeed, to prohibit, competition in a field so vitally connected with the public welfare may not constitutionally be placed in the hands of a private organization such as the medical society which has an interest in promoting the welfare of the only existing medical service corporation (Blue Shield) in the state."

Group Health Insurance Inc., of New York, applied for medical society approval for its New Jersey plan in 1961 and was turned down.



"What rhymes with hysterectomy?"

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MAYO CLINIC—CLINICAL EXAMINATIONS IN NEUROLOGY
A famous medical center's working blueprint to effective neurologic examination

DEATHS

BRYAN, JOHN THOMAS, Meridian. M.D., University of Tennessee College of Medicine, Memphis, 1944; interned Baptist Memorial Hospital, Memphis, Tenn., one year; residencies, Protestant Hospital, Nashville, Tenn., one year, Pratt General Hospital, Miami, Fla., one year, and Fort Sell Hospital, Laughton, Okla., one year; president, Lauderdale County Medical Society, 1954; captain, U. S. Army, one year; died June 20, 1963, aged 44.

COURSEY, WALTER MACK, Raleigh. M.D., University of Louisville School of Medicine, Ky., 1929; died June 8, 1963, aged 57.

EUBANKS, OSCAR GRAY, Crystal Springs. M.D., Tulane University School of Medicine, New Orleans, La., 1928; interned Shreveport Charity Hospital, La., one year; a past president of Tri-County Medical Society and Central Medical Society; former vice president of MSMA; died June 25, 1963, aged 61.

State Morbidity Reported Through July 5

The Mississippi State Board of Health reports the following occurrence of morbidity for 1963 through the 27th week of the year, ending July 5, 1963. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	397
Tuberculosis, O.F.	14
Typhoid Fever	2
Encephalitis, infectious	10
Salmonella infections	11
Dysentery	
Bacillary	5
Amebic	7
Food Poisoning, NOS	21
Diarrhea of Newborn	1
Septicemia, Staph.	44
Meningococcus infection	
Meningitis	17
Meningococcemia	1
Meningitis, O.F.	33
Poliomyelitis	1
Tularemia	2
Mononucleosis, infectious	66
Other Cestode Infest. (HN)	1
Hepatitis, infectious	379
Rocky Mt. Spotted Fever	1
Helminthic infections	
Hookworm	641
Ascariasis	220
Strongyloides	29
Sporotrichosis	1
Generalized Vaccinia	1
Rheumatic Fever	3
Histoplasmosis	5
Streptococcus infections	
Scarlet fever	193
Strep throat	1,557
Pertussis	70
Measles	907
Chickenpox	919
Tetanus	1
Mumps	572
Other complications of small pox vaccination	3
Influenza	32,128
Gonorrhea	2,611
Syphilis	
Early	216
Late	93

25 Interns Begin Training at UMC

Twenty-five interns reported on July 1 to the University Hospital in Jackson for their 12-months' training.

Included were 14 University of Mississippi School of Medicine graduates, three from Vanderbilt University School of Medicine, three from the University of Florida College of Medicine, two from the Louisiana State University School of Medicine, one from the University of Pennsylvania School of Medicine, one from the University of Kansas School of Medicine, and one from Hahnemann Medical College.

Four who began straight internships were Dr. Harvey Sykes of Natchez, pathology; Dr. Kimble Love of Jackson, pediatrics; Dr. Alvin Brent of Jackson, and Dr. Ray Wesson of Vicksbuug, medicine.

Three women are numbered among the 21 rotating interns who are Dr. Bruce Black of Windermere, Fla.; Dr. Albert E. Breland, Jr., of Laurel; Dr. Nancy W. Burrow of Pelahatchie; Dr. A. B. Collins of Lake City, Fla.; Dr. T. E. Corley of Moss Point; Dr. D. J. Davis of Peckville, Pa.; Dr. J. T. Davis, Jr., of Corinth; Dr. Leo Farmer of Jackson; Dr. Joseph M. Harper, Jr., of Gainesville, Fla.; Dr. Mary Hawkins of New Orleans; Dr. Richard Hill of Jackson; Dr. James Hudson of Tonganoxie, Kansas; Dr. Charles Lee of Jackson; Dr. Harold Lovvorn of Athens, Ala.; Dr. Charles Marascalco of Grenada; Dr. Jerry Moore of Jackson; Dr. William O'Quin of Metairie, La.; Dr. Charles Sampson, Jr., of Jackson; Dr. Rita Siler of Guthrie, Ky.; Dr. Michael Wilhoit of Grayson, Ky., and Dr. Fletcher Zimpfer of Sidney, Ohio.

Surgeons Set Golden Anniversary Meet

The annual Clinical Congress of the American College of Surgeons will be held during the College's semicentennial year in San Francisco, Oct. 28 through Nov. 1. More than 11,000 Fellows of the College and guests from all over the world will gather to discuss surgical developments of benefit to thousands of patients.

Every phase of surgery will be presented during the five-day program, through 258 research re-

[Turn to page 26]



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ports, 10 postgraduate courses, 42 panels in general and specialty fields, 21 cine clinics, 57 medical films, 12 operative telecasts, and 329 exhibits.

Dr. Loyal Davis, Chicago, president of the College, will preside at 50th anniversary ceremonies on the opening morning. Major addresses during the week include: the Scudder Oration on Trauma, by Dr. Edwin F. Cave, Harvard Medical School; the Baxter Lecture in the field of parenteral therapy by Dr. Frederic Crosby Bartter, National Heart Institute; the Martin Memorial Lecture, which commemorates Dr. Franklin H. Martin, the College founder, by General Lauris Norstad, retired NATO commander; and on the evening of Oct. 31 the incoming presidential address by Dr. J. Englebert Dunphy, professor and chairman, Department of Surgery, University of Oregon Medical School. On this evening also approximately 1,050 initiates will become Fellows of the College, having fulfilled requirements for Fellowship, and Honorary Fellowships will be awarded. On the same afternoon the Distinguished Service Award winner will be named.

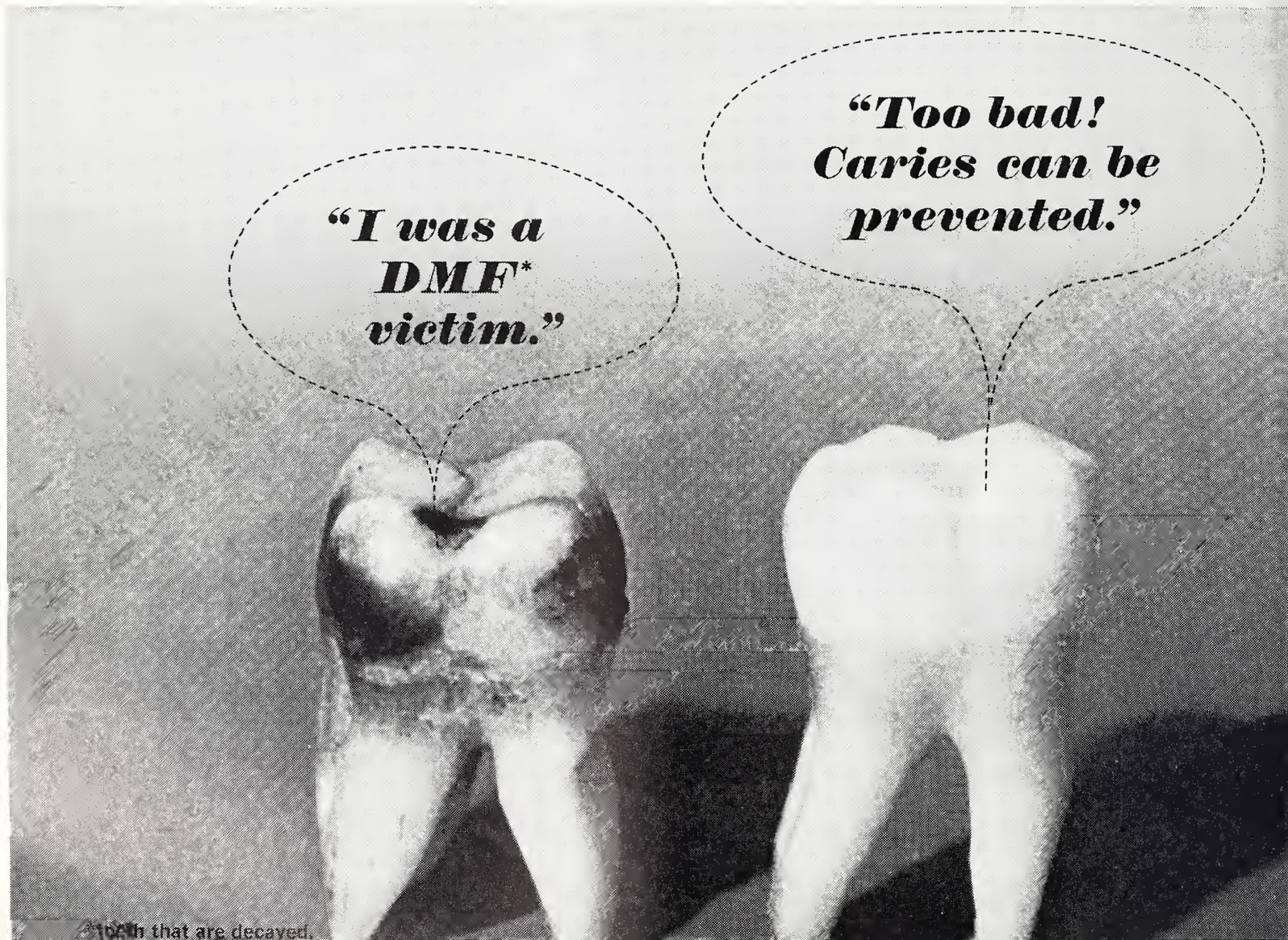
The College was founded in 1913 by 450 surgeons of Canada and the United States to elevate standards of surgery. Membership in this voluntary association now totals 25,500 in 79 countries. Dr. James T. Priestley, Rochester, Minn., is chairman of the board of regents of the College, and Dr. John Paul North, Chicago, is the director.

1962 Was Big Year For Accidents In U.S.

The accident toll jumped sharply in the United States during 1962 when an average of more than 135,000 persons suffered accidents each day of the year, according to the Health Insurance Institute.

A total of 49.8 million persons suffered injuries last year causing one or more days of restricted activity or requiring medical attention, said the Institute in reporting on data developed by the U. S. Public Health Service.

The 1962 total was by far the highest in recent years. The next highest years were 1958 and 1961, each with 47.1 million accidents. In that span, 1959 was low with 43.0 million accidents.



The summer months of July, August, and September generally account for the biggest quarter in accidents. The third-quarter of 1962 produced 14.1 million accidents, followed by the second-quarter—April, May, June—with 13.7 million, a jump of 2.1 million over the second-quarter of 1961.

In terms of the types of accidents which occurred, the most dramatic changes came in motor vehicular accidents and accidents on the job.

Last year, 5.1 million persons were injured in motor vehicle accidents, reversing the trend which began in 1961 when 4.4 million persons were so injured and returning to the pace of 1960 when 5.0 million were injured.

A downward trend continued in the number of persons injured in accidents while at work. The 1962 toll was 7.2 million persons so injured, down significantly from the 1961 figure of 7.6 million, and a steep drop from the 1960 toll of 8.7 million.

Home continued to be the most dangerous spot. A total of 21.4 million persons were injured in the home in 1962, an increase over the 1961 total of 20.6 million persons, in itself a jump over the 1960 total of 19.0 million persons. All other accidents injured 16.2 million persons last year, compared to 14.4 million in 1961, and 13.8 million in 1960.

University Sponsors Monday Night Seminars

The first series of eight Monday Night Seminars for physicians sponsored by the University of Mississippi School of Medicine ended July 15. Lecturers for the initial series were Dr. Louis Wise, Dr. George Purvis, Dr. D. J. VanLandingham, and Dr. Blair Batson.

A second series is to begin in August. The Monday Night Seminars are planned by the Postgraduate Education Committee and the Department of Preventive Medicine. Attendance is approved for MAGP credit and no registration fee is charged.

Announcements are mailed to family physicians within an hour's drive to the University School of Medicine but those living at greater distance may receive the programs by writing to the Public Information Office.

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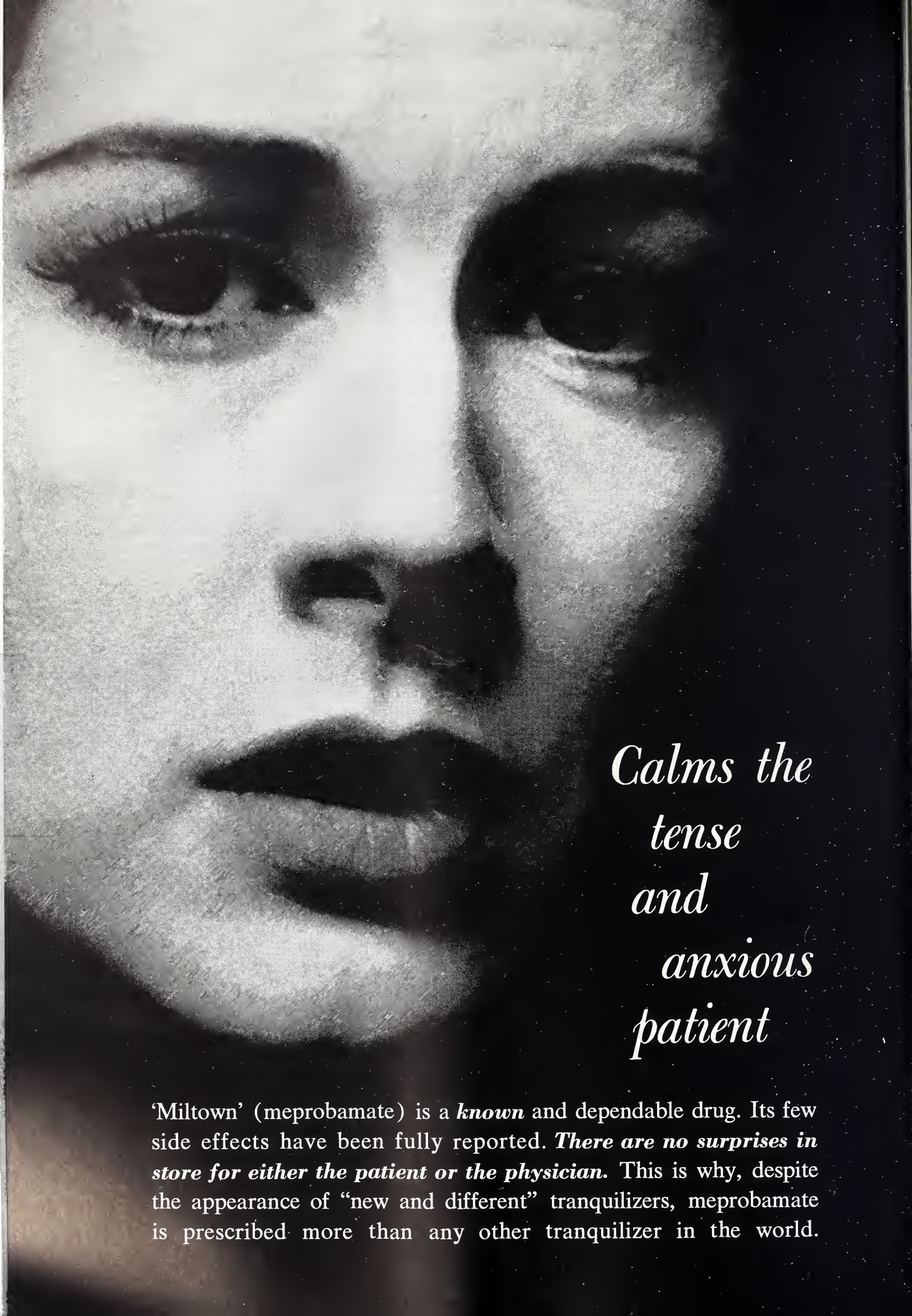
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Articles for Publication

Manuscripts should be typewritten, double spaced on one side of the paper. Tables, charts, and tabulations should be submitted on separate sheets but their position in the text should be indicated. Authors are encouraged to limit bibliographies to 10 references, written in conformation to style utilized in scientific publications of the American Medical Association. Articles are accepted for publication on the condition that they have not been previously published and are contributed solely to this JOURNAL.

A thesis summary of 75 to 100 words must accompany each manuscript separately from the text. Figures and drawings are acceptable when prepared with black ink on white paper. Photographs for illustrations should be unmounted, untrimmed, glossy prints and all such material must be identified. No charges are made to authors for illustration engravings not exceeding four column inches per printed page.

Reprints may be obtained at cost from the association. The right is reserved to decline any manuscript for publication. Ordinarily, manuscripts submitted will be acknowledged whether published or not.

THE EXPERT DROWNERS

Researchers say that many "mystery drownings" involving expert swimmers may be attributed to overbreathing. In an effort to stay under longer, veteran swimmers often take too many gulps of air before surface diving. Such gulps can prove fatal as they delay the built-in urge to breathe to a point where the submerged swimmer loses consciousness and drowns. Reflex action can keep the almost unconscious swimmer's body in motion so that even a trained instructor on the scene may not realize what is happening until it is too late.

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Volume IV
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September 1963



JOURNAL of the Mississippi
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NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION
JACKSON, MISSISSIPPI

September 1963

Dear Doctor:

Six top American drug makers are accused of price fixing by the Federal Trade Commission which reversed its own hearing examiner who first found them guiltless. American Cyanamid, Bristol Labs, Bristol-Myers, Squibb, Pfizer, and Upjohn were held to have rigged prices for tetracycline and FTC charged irregularities in Pfizer's patent on drug.

> At initial hearings, FTC examiner held price fixing highly improbable because of intense competition among firms. Law allows 60 days to appeal to U.S. courts which, if done, will stay "cease and desist" order.

Quietly, without headlines, U. S. Senate voted to permit segregation in Hill-Burton hospitals by beating a proposed amendment to public health appropriations. In passing $1.2 billion for U.S. Public Health Service, $50 million of which is for Hill-Burton construction, Senate voted down a "nondiscrimination" amendment by liberal N.Y. Republican Jacob Javits 44-to-37. House also passed bill without amendment.

Physicians in military service get double pay boost under new program of Defense Department. In addition to pay raise for all service personnel, doctors will receive additional incentive pay of $100 monthly for first two years of service, $150 per month for next four years, $250 after six years, and $350 after ten.

Kansas chiropractors are waging a losing fight to perpetuate legalized spine punching in the Sunflower State. Courts there have held state healing arts law valid in cultists' suit to have it declared unconstitutional. Examining board has admitted no new chiropractic applicants to practice since 1957 for the good reason that none has passed written examination.

A new interorganization scientific task force is working to preserve freedom of medical researchers to use experimental animals to save human life. Included are AMA, American Veterinary Medical Association, American Hospital Association, and educational and research organizations. Gist of program is necessity of animal research in medical progress. All agree on humane methods and best animal care.

Sincerely,

Rowland B. Kennedy
Executive Secretary

DATELINE - MEDICAL AMERICA

Lauderdale Judge Orders Transfusion For Injured Youth

Meridian - The critically injured son of a Jehovah's Witness minister received blood transfusions on court order after physicians testified that the boy might die without them. Michael Looper, 13, of Lake Jackson, Texas, was injured in an auto accident which claimed the life of his father. County Judge J. E. Harwell made the ruling after holding court in the hospital where the boy was a patient. Jehovah's Witnesses say they base anti-transfusion belief on Leviticus 17:14 and Acts 15:28-29.

Two Leading Drug Manufacturers Agree On Merger

Chicago - Inside report is that Abbott Laboratories and G. D. Searle Co. will soon announce a merger, both having agreed on stock swaps based on Searle's higher value per share and Abbott's greater earnings. Abbott owners will receive two-for-one, while Searle shareholders will get 1.2 shares of new common issue and one of preferred voting stock. Each company has about 4 million shares outstanding with Abbott trading on big board at about 113 and Searle over-the-counter at about 143. In 1962, Abbott did $141 million and Searle, $56.6 million.

Cigarette Makers Brace For Blast From USPHS And AMA

New York - The American tobacco industry has a case of biostatistical jitters as it hangs on tenterhooks waiting to see forthcoming report of U.S. Public Health Service on tobacco and health. After declining to act at Atlantic City, AMA is expected to take a policy position after USPHS report is released. Meanwhile, public seems stirred over controversy and cigarette consumption is down among the 62 million Americans who smoke. Economic stakes are high, what with 3.5 million employed to some extent in tobacco industry which also yields $3.2 billion in taxes annually.

PMA Hits Advertising Censorship

Washington - The Pharmaceutical Manufacturers Association and 44 drug makers filed formal objections to the Food and Drug Administration's crackdown on ethical advertising. Assumption of authority for federal pre-publication censorship of journal ads was described as a disregard of statutory command, going beyond law and intent of the Congress.

Hospital Costs Are Reported Doubled In Decade

Chicago - The average cost per patient day in hospitals has zoomed to $36.83 from $18.35 in 10 years, according to studies released by the American Hospital Association. Report says costs for average patient stay - just over a week - increased to $279 from $148 in same period. Studies were made in nonfederal hospitals which comprise 79 per cent of all such institutions and have 92 per cent of all admissions each year.

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
September, 1963, Vol. IV, No. 9

ORIGINAL PAPERS

Medicine and Religion: Today's Enlightened Care

C. P. CRENSHAW, M.D.
Collins, Mississippi

Medicine and religion have not always enjoyed a cordial relationship. For centuries, the theologians looked upon all scientists, including physicians, as heretics. The scientists, in turn, considered the religionists perpetuators of superstition upon the masses. Out of the 20th century, however, has come the concept that man is a total being not readily separated into his three component parts of physical, mental, and spiritual. Health care, therefore, must be aimed at the total man. In recognition of this growing philosophy, MSMA devoted part of its 95th Annual Session to a Seminar on Medicine and Religion. Journal MSMA takes pride in publishing these five original papers by men nationally known in the field of medicine and religion. In the keynote address, Dr. Crenshaw discusses medicine's position.

NEARLY EVERY PHYSICIAN reared and trained within the sphere of Judeo-Christian influence believes that the mission of healing is at least righteous, if not, indeed, divinely inspired.

Many may experience difficulty in expressing this belief. Some may not really understand it. A few may not even know that they believe it. But just as General Eisenhower said during World War II that "there are few atheists in the fox holes . . ." so may it also be said that there are few in the operating suite and at the side of the hospital bed. We have good reason to address ourselves to the pertinent matter of medicine and religion and the interrelationships which make it difficult to say where one begins and the other ends.

Scientific medicine is moral in purpose and practice. Now, this alone demonstrates no relationship with religion, but few can deny that morality is an indispensable stepping stone to that worthy end. Nearly four centuries before Christ, Hippocrates recognized these tenets. His oath, to which every American physician subscribes, hardly appears related to its author's pagan gods. It could have just as easily been written by Moses or David, by Paul or John.

The Hippocratic Oath, first sworn to Apollo, Aesculapius, and all the gods and goddesses of the classic Greek mythology, is a deep personal dedication on the part of the physician. In it, he identifies and accepts ethical and moral obligations to his patient, his debt to his teacher which can be repaid only by his teaching, his respect for

1962-63 President of the Mississippi State Medical Association.
Read before the Seminar on Medicine and Religion, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 15, 1963.

human dignity, and his sacred regard for the value of life.

"With purity and with holiness I will pass my life and practice my art," declares Hippocrates, affirming that he will give no deadly medicine nor commit any harm to his patients.

Still another important relationship between medicine and religion is apparent in the beginning of the hospital as a medical institution. The first such places of care for the sick and injured were established by religious bodies. These were tangible expressions of man's humanity for man.

THE FALSE PHILOSOPHY

It is a tragic commentary upon 20th century morality that a third of the people on this planet cannot or will not concede a relation between science and religion. For them, religion is materialism and science is their god. This is the false philosophy of Marx and Lenin, the godless creed of world communism. None among us denies the capability of scientific attainment by communist medicine. After all, its disciples have the full benefit of medical discovery in the free world because that which we are able to add to man's knowledge of healing is freely and openly given.

But I should not want to be the patient of a physician who fervently believes that there is no god but the state and its materialistic goals. There is reason to question the qualitative benefits of such care. The absence of compassion clearly underlines the nature of the climate in which it is rendered. Medicine in the atheistic, totalitarian state is, at best, merely another instrument of policy. It must, therefore, deny man's divine creation, his God-given dignity, and the value of his life.

Sooner or later, every physician realizes that medical science can do only this: it can exert some influence upon the circumstances under which death occurs. This conclusion is both negative and grim, but temporal quantities are created to end. To me, this suggests the anguish which must repose in patients whose care is limited to the ministrations of materialism, however advanced scientifically it may be.

Pasteur's great name is associated with the worthy goal of physicians of his day: "To heal some, to relieve many, and to comfort all." Today, we of medicine have merely altered the ratios, but the goal is still the same.

To those who are laymen before theology, religion suggests many things. We may think of it as churches and synagogues, as prayers and sermons, as creeds and liturgy, as people sitting quietly together in the experience of worship.

But more realistically, most physicians know that religion is concern for experiences which it regards as of supreme value. It is devotion to a Power originating, increasing, and conserving these values. It must include a suitable expression of this concern and devotion, whether through formal ritual or individual and social conduct. This, I believe, and I feel that the definition is consistent and compatible with the goals of American medicine.

The first section of the Principles of Medical Ethics of the American Medical Association begins by reminding physicians that "the principal objective of the medical profession is to render service to humanity with full respect for the dignity of man." The admonitions that follow in this brief document encourage the doctor to render service with a full measure of devotion, to improve his skills, to merit trust and confidence, to observe all laws, and to purge himself of those whose conduct fails to meet with these standards.

These aims to which physicians voluntarily subscribe are consistent and compatible with the goals of religion.

TWO SCIENTIFIC CATEGORIES

Most of us were taught that there are two categories of science, the formal and the empirical. Those formal sciences, such as logic and mathematics, deal with laws of implication and deduction which are universally valid in the sense that they are not changed by experience. When most people think of science, they are really thinking of empirical science where a particular demonstrable experience is observed and attempts are made, by repeated experiment, hypothesis, and observations, to describe the laws of its phenomena. Such sciences include physics, chemistry, and medicine.

From these definitions, it is readily concluded that there is a broad philosophical base for the interrelationhips between medicine and religion. The ultimate rationale is within systems of theology, the discussion of which is most appropriately reserved to theologians. But the physician deals with life and its value, and more than any other scientist he is brought face to face with its beginning and its end.

This is more than an equation, more than a molecule, more than a body of abstract data.

Appropriately, the American Medical Association has recognized this interrelationship and es-

tablished a Department of Medicine and Religion. It is exploring these relations which predate and continue through the Judeo-Christian era. And we doctors of medicine, so accustomed to talking in terms of drugs and technics, realize, as only physicians can, that the formal opening of this field gives new dimensions to the art and science of healing.

It is within this frame of serious reference that our Mississippi State Medical Association made the decision to present this Seminar on Medicine and Religion. We have been fortunate in calling together those of national reputation in theology to discuss these concepts from skilled and informed viewpoints. What is said here today is important to the physical and spiritual well-being of every patient.

What better way can we render service to humanity with full respect for the dignity of man?

★★★

Crenshaw-Folse Clinic

NEW DIET FOR PEARLS

Antibiotics are doing wonders for pearl necklaces these days. Latest use for medicine's most versatile modern aids is as a diet for growing bigger and better cultured pearls. A new report from the American Cyanamid Company's Japanese affiliate, which developed a product called Pearl-Up (active ingredient: Aureomycin chlortetracycline), indicates that four years of feeding oysters on an antibiotic-spiked diet have yielded a 30 per cent increase in perfect "moon tear" pearls. The ancient Japanese cultured-pearl industry has never been able to reap pearls from more than 60 per cent of the oysters in a seeded bed, and only 5 per cent of these could be considered perfect. New results of the antibiotic experiment, reported in Japan's *Fishery Science Monthly,* indicate that the concentrated diet of drugs not only increases the percentage of perfect pearls, but also brings an important increase in the total yield.

Man, A Total Being

THE REVEREND PAUL B. MCCLEAVE, LL.D.
Chicago, Illinois

Recognizing that man is a total being and that the physician who treats his physical ailments must also be aware of his spiritual mental, and social problems, the AMA established its Department of Medicine and Religion in 1961. Dr. McCleave, who has headed the department since its founding, discusses its activities and purposes.



DR. MCCLEAVE

He notes that four areas of interest are being studied: (1) hospital chaplaincy, (2) pastoral clinical training centers, (3) studies in medical schools, nursing schools, and theological seminaries, and (4) faith and healing. Dr. McCleave writes that the department was not established to set down specific answers or to further particular faiths. Rather, he says, its purpose and desire is to call to the attention of the doctor and the clergyman that each patient has a faith and all his problems must be considered in the light of that faith.

MAN IS A WHOLE BEING. It is impossible to divide him into separate areas or categories. His vocational life affects his mental attitude. His social well-being can create strength or weakness in his physical being. Though all men may not recognize it, each individual's faith gives confidence, certainty, and hope for whatever he does. In the art of healing we seek then to bring together the spiritual, medical, mental, and social factors to be applied to the patient or the parishioner that his health might be strengthened.

Not only in its vastness of space but in its vastness of knowledge, the world in which we live makes each one of us realize how little we know. Actually we may take pride in humbling ourselves to admit our ignorance. It would be foolish conceit for any man to think that he and he alone has the mentality and the experience to answer all problems, all troubles, and all concerns of an individual. Even in the area of medicine no one doctor can understand or comprehend or know all scientific knowledge. The theologian may be well versed in the theology and doctrine of his particular faith, but he does not claim to understand the detailed intricacies of all theologies.

The physician and the clergyman, deep within their hearts, have a sincere and vital interest in the patient or the parishioner. In a sense each is called to his profession, a calling that underlying all of our front is a calling of compassion, tenderness, and concern. The cry of the needy is heeded by each one of us. As men of concern, we should strive then to make possible in times of illness to use all of the facilities that are at hand to bring about total health. It is not a matter that each patient that is seen requires consultation by colleagues of the medical profession or referrals to a clergyman. Nor is it true that each parishioner who seeks counsel from his clergyman requires consultation by other colleagues or referrals to doctors. But, there are times and there are areas involving the life of the patient and the parishioner in which the two professions could be of help one to the other in making possible the complete healing rather than partial healing.

In our short time this morning, it would be impossible to raise all of the areas of concern in which we must in time to come consider. However, I wish to present three examples wherein doctor and clergy should stand together and work together in the concern of the patient.

There is an automobile accident, the crashing and crunching of steel. A small child is thrown from the car and instantly killed. The mother,

Director, Department of Medicine and Religion, American Medical Association.

Read before the Seminar on Medicine and Religion, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 15, 1963.

who was the driver of the car, has a mild shock, a simple fracture of a leg, mild bruises and lacerations. Upon examination at the hospital no internal injuries are found. The following morning her personal physician, who had delivered her child, states, "Martha, you are going to be fine. In a few days you will be able to go home. With a walking cast you will be able to care for your family. There are no internal injuries. You are going to be fine." Martha replies, "This is true perhaps in your mind, but I need to die. I have lost my child which is God's punishment to me."

An elderly cancer patient lies in a hospital bed, body burning with fever. He has been in a coma for three days. He is given drugs to ease his pain and nourishment is supplied intravenously. He is under an oxygen tent. The doctor and a son of the patient ask how long and to what extent should extra-ordinary measures be continued to maintain life?

WITH ADVANCE—PROBLEMS

The advance of medical knowledge, wonder drugs, hospital facilities, and nursing care has in a real sense created miracles in the manner of treatment and care. These advances, however, have also created problems—problems which demand decisions which perhaps in the past we did not have to make.

A being is born physically deformed and weak and with no mentality. In times past God in His grace received that life after two or three days, two or three weeks, or perhaps two or three months. But today with drugs, facilities, and care, this being might be kept alive, without mentality, totally dependent for survival upon others, for 10, 20, 30 years or more. One might ask the question: Is it possible that we might thwart God's will by maintaining earthly existence as compared to the wonders of eternity?

I suggest to you today that there are probably no "yes" or "no" or "black" or "white" answers to these and many other concerns which we have. The suggestion that I do make is that in these cases the medical scientist, who is the doctor, and the theologian, who is the clergyman, need to come together and confront themselves as partners in seeking guidance and direction in which a decision can be made in the particular circumstance. No two patients are alike, nor are any two parishioners alike. One family's background and attitude cannot be compared with any other family. These are times when we are dealing with life and death. No man wishes to be God in trying to make such decisions, but these decisions must be made and the physician and the clergyman together can lead, direct, and help the patient and the family to find the compassionate answer.

DEPARTMENT'S PURPOSE

When the American Medical Association established the Department of Medicine and Religion, it had no intention of setting down specific answers or furthering particular faiths. Its purpose and desire is to call to the attention of the doctor and the clergyman that each must recognize that a patient has a faith and in all of his being that faith must be considered whether his problems are physical, spiritual, mental, or social. The physician or the clergyman may disagree with the patient's faith; he may even find that faith distasteful. But the fact remains, the patient's faith must be recognized, and the patient must be cared for and treated within the realm of that faith. I personally would disagree with the woman who stated that she lost her child because of God's punishment to her for a sinful act of the past. But the physician and the clergyman must recognize that this is her faith and her belief, and she must be cared for in that faith.

The illustrations used are only to signify the many areas of concern in which physician and clergy need to meet and communicate. This is anticipated by the development through American medicine of a state committee on medicine and religion in each state medical society. The state committee then will encourage and assist the county medical societies to invite the clergy of all faiths to discuss these areas of concern, misunderstandings, and problems. It is interesting to note that medicine is taking this lead because it feels that, as a group of professional men representing all organized faiths, it can bring together clergy of all faiths to begin communication.

In April of 1962 the Board of Trustees of the American Medical Association, appreciating the desire on the part of American medicine to further its relationship with the clergy in the area of patient care, appointed a committee of nationally known clergymen representing the various areas of medicine. This committee has met and established for itself and the department areas in which further activity will be considered during 1963. Recognizing the importance of this committee, the board appointed Dr. Milford O. Rouse, vice-speaker of the House of Delegates of the American Medical Association, as chairman of the committee.

Four areas of interest are to be studied. These are (1) hospital chaplaincy, (2) pastoral clinical training centers, (3) studies in medical schools, nursing schools, and theological seminaries, and

(4) faith and healing. Physicians are concerned and are seeking information relative to these areas. The purpose of the studies will be to gather information from groups that are working in these areas and then inform physicians across the country of these activities.

I would like to close with a thought that has been said many times and in many ways: The doctor diagnoses, prescribes, and shows compassion, but God heals; the clergyman speaks, prays, and brings the parishioner to God, but again it is God who heals. ★★★

535 North Dearborn St.

TOBACCO QUESTION

The cigarette manufacturers may resolve the smoking-and-health controversy by frustrating the public, a recent story suggests. Seems that a fellow walked into the drug store and ordered a carton of popular brand cigarettes. The transaction went thus:

Salesgirl: "Do you want the soft pack or the crush-proof box?"
Customer: "Soft pack, please."
Salesgirl: "King size or regular?"
Customer: "King size."
Salesgirl: "Filter or plain?"
Customer: "Filter."
Salesgirl: "Menthol or mint flavored?"
Customer: "Menthol."
Salesgirl: "Cash or charge?"
Customer: "Forget it. I've broken the habit."

—James Ward, *Jackson Daily News*

Men of God and Science

JULIAN B. FEIBELMAN, Ph.D., D.D.
New Orleans, Louisiana

Dr. Feibelman begins with a discussion of the historic relationship of medicine and religion, leading into an outline of the "why" of cooperation. He points out that ministers have grappled with the multiple social problems of the day because the problems are human. Ministers, as doctors, are their brother's keeper, he says. Dr. Feibelman observes that the bond of cooperation grows stronger, as this principle is understood: Science without religion can be destructive; religion without science can become superstition. He devotes the final portion of his paper to a consideration of Judaism and health, noting that throughout its history Judaism has maintained its conviction that the health of the individual is essential to religious harmony.



RABBI FEIBELMAN

THE BARRIERS OF DEMARCATION which once separated religion from science are no longer strictly drawn. These two serving and dedicated arts complement and buttress each other. We share the belief that one may enjoy full health only if the mind is adequately steady and the spirit uncrushed. We were once separated in our functions.

Many years ago in my first pulpit in Philadelphia, the oldest couple in our Temple, husband and wife, aged 92 and 87, were frequently a charming sight as they walked down the long aisle to the very first pew. I know they heard not a word, but they were at peace with the world and themselves.

One night when it was heavily snowing, someone called me about 3 a.m. to come at once—Mr. X was dying. I got there quickly, ran upstairs, and entered the sick room, heavy with odor and heat and crowded with family.

Mrs. X arose instantly from her chair by the bedside and pointed her hand toward me with this challenge:

"Man of God, now is the time to show what you can do for my husband. Ask God to spare him. Show the power you possess!"

I was so astounded by this dramatic charge that I went to her and quietly sat her down. The door opened and in walked a man strange to me. She was on her feet again, and with pointing hand imperiously addressed him:

"Man of science, now is the time to show your skill. Save my husband. Give him back his health."

This doctor, small with a waxed mustache and dapper at 3:30 a.m., did not notice her. He went to the patient, took the pulse, and looked at the chart. We were introduced across the bed. Immediately he said, "Rabbi, this is now your case."

I replied, "Don't give me the full responsibility just yet."

He replied, "Don't pass the buck—as it were!" That was a new expression then. He did not tarry.

I began the prayer, "May it be Thy will . . ." When I finished, the old lady arose, bowed regally, and said, "You are a man of God. I thank you."

We have made progress in better coordinating both medicine and religion. No longer are we rival teams standing apart. Today we acknowledge the powerful psychological involvement set within the physical frame.

"The sound mind in the sound body," Juvenal spoke of in the first century. Not so well known is his next admonition: "Pray for a bold spirit, free from fear of death." Even today we cannot

Rabbi, Temple Sinai.

Read before the Seminar on Medicine and Religion, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 15, 1963.

adequately separate the spiritual from the mental or the physical. Perhaps we should not try.

THE 'WHY' NOT THE 'HOW'

It is an honor to participate on this panel, and I pay tribute to the Mississippi State Medical Association for its concern with closer communication between medicine and religion. Both teach that man is one and indivisible. We do not debate the spiritual component in his wholeness. I hope to examine the "why" of cooperation between medicine and religion, instead of the "how."

Hippocrates, the father of medicine (460 B.C.) has a work on "The Sacred Disease" in which he writes, "As for this disease called divine, surely it too has its nature and causes." He thus admitted he did not know what epilepsy was and concluded it must be a divine visitation.

Historically, religion was the enemy of science. The reward for independent thinking and scientific adventure was torture and death. Galileo was forced to recant; Spinoza was excommunicated; Copernicus' writings were published posthumously. Both Jenner and Pasteur were resented.

In our time has come the reversal. Science has been in the ascendancy and acclaimed. Today it motivates politics, government, and diplomacy—as well as benefits life. Science did not retaliate against religion, it ignored religion. This has had good effect. Religion, on the defensive, had to reconstruct. Most denominations have done this. Religion remains in the sanctuary, but it enters the home and seeks to serve every need of man. Medicine has to await the call. Religion usually awaits the opportunity to call.

Ministers have grappled with the multiple social problems of the day because the problems are human. Public health, social morality, economic stability, and political honesty involve each individual and his family, every neighborhood and commmunity. Religionists are still told to mind their own business and stick to the Bible. That is precisely what they try to do, mind the business that involves the lives of people and teach the basic principles of decency and character in the Bible. Ministers are their brother's keeper, as are doctors.

The strain between our groups is over. The bond of cooperation grows stronger as we understand this principle: Science without religion can be destructive, religion without science can become superstition.

It is quite commonplace today for a doctor to call a minister and say, "I'm sending my patient to you." The minister never tried to become a practitioner, but he had to be warned not to practice psychiatry. Many ministers have studied it, some have been analyzed (I know a few more who should be). But, as a rule, we refer overladen parishioners to the proper practitioner. At the same time, I believe that doctors have become more religious as affiliates and in attitude.

Ministers were once chided because they spoke of the soul or spirit as a part of the body. The old technician scoffed at the soul, saying that in years of dissection he never discovered one. Every scientist today admits that he has a mind, but not one has ever anatomized it. We cannot locate the mind, nor consciousness, conscience, nor obsession, nor guilt, sin, nor complex. As a matter of fact, no doctor ever saw an actual pain, only its effects. None quibble about their reality, nor the powerful influence they exert, nor their realistic challenge to science. No one ever saw an atom; it is a postulate, a concept. Yet we live in the atomic age. I think we all realize that the so-called unreal is the realest of all reality. None of us ever saw goodness, or an idea, or a thought. None of us doubts that each is very real. Life would have grown extinct eons since without the persistent thrust toward things unseen and unknown.

JUDAISM AND HEALTH

In Judaism this intangible and mystic possession discovered God, monotheism, and the moral law. In this belief, Judaism maintained its conviction that the health of the individual was essential to religious harmony. "There is no wealth like health," says Ben Sirah in the Apocrypha (30:16). "There are thousands of diseases, but only one health," says a commentator. Biblical writers realized that acceptable relationship with God depended on health. Impurity and infection, recognized by bodily symptoms, incurred sin and the loss of God's favor. Thev isolated one from religious observance. The infected were separated for the protection of the community until the priest purified them. The purification rite is still practised as baptism. It cleanses and renews the whole being.

The early Hebrews, with their intense interest in health, linked it with religion. In Biblical times health and disease emanated from the Divine. "I kill and I make alive. I wound and I heal" (Deuteronomy 32:39). God tells Moses, "I am the Lord that healeth thee" (Exodus 15:26). A Tal-

mudic commentary says, "He who prepared the plaster, then inflicts the wound" (Megillah 13a). God is the healer, but the Bible considers the physician a distinct class. Joseph called a physician for his father (Genesis 50:2); Asa sought not God, but a physician (II Chronicles 16:12). The Biblical injunction was "I shall cause them to be thoroughly healed" (Exodus 21:19). Maimonides (1135-1206) a great rabbi, philosopher, and a great physician, explains the passage in Deuteronomy (22:2), "Thou shalt restore it to him" as meaning one's health—as well as his property. Rabbi Ben Nachman (d. 1270) explains this to mean that no preceptor could exact a fee from his student—the master was restoring to his student the losses of his body.

Biblical teachings were also public health requirements. They dealt with food and food handling, what and what not could be eaten, and diseases, such as leprosy and trichinosis and social hygiene. The individual was the concern of the community.

Biblical laws forbade intermarriage between relatives. Eugenics were surmised, if not fully understood. Circumcision, although religious, was considered a health measure. In the Talmud (200 AD—500 AD) it says that those not Jewish also requested circumcision.

Food restrictions and circumcision have been practiced for centuries. The dietary laws are not as scrupulously observed as once they were; but circumcision is common practice. The bond uniting religion and health is just as religious today, only more scientific.

Talmudic literature abounds with reference to health and the physician. A medical book is attributed to Solomon; also cited is a treatise on pharmacology—neither is preserved. Anatomy was based on animal dissection because humans were inviolate. These old rabbis recognized the pathological process, that symptoms of disease are outward evidences of internal changes. Neither Hippocrates nor Galen reached this stage. The period of gestation in the Talmud is 271-273 days and is considered surprisingly accurate. The Talmud discusses the nervous system, pathology, therapy, obstetrics, surgery, mental illness, and fears.

Talmudic Rabbis had a profound respect for the doctor: "A physician who treats without a fee, merits no fee." It says, "A physician can heal at a distance as well as a blind man can see," and "A remedy which is good for one is not necessarily beneficial to another."

One comment links the doctor to divinity: "My cure comes from God, the Maker of physicians."

But in the overall concern for health the religious law was abrogated. Fasting was a strict obligation, and on the Day of Atonement it was compulsory for everyone over 13 years old. In the Mishnah (Yoma 1, 1; 200 A.D.) it says, "On the Day of Atonement eating and drinking . . . anointing are forbidden." Yet a wound may be anointed. Further it says, "Food may be given to a sick person" on the advice of expert persons. The expert person is the doctor, who may be (Yoma 1) Jewish or non-Jewish. It continues, "The patient must be made to eat even if he says it is unnecessary. Even if the doctors say he can fast safely, and the non-Jewish doctor says the patient may not do so in safety, the advice of the latter must be followed, even if the patient thinks he can go without food."

As for the Sabbath, it says, "A case of risk of loss of life (or any illness that engenders the risk of loss of life) supersedes the Sabbath law." Secular reading on the Sabbath was forbidden. But—"medical books are considered so valuable as a source of wisdom they are to be permitted to be read on the Sabbath" (Zimmels, H. J.).

Throughout the long history of the Jewish religion the duty of visiting the sick is considered a commandment, for God visited Abraham. One is to cheer and help the sick, unless it imposes a strain or puts the patient to shame because of some illnesses.

In our regular Sabbath prayers, God is still addressed as "sustaining the living, upholding the falling, healing the sick, and loosening the bound." He is "the Author of life and death, and the source of salvation."

Rabbi Maimonides, physician and philosopher to whom Thomas Aquinas pays tribute, might be more the doctor than Rabbi when he says, "The well-being of the soul can be obtained only after that of the body has been secured." Let us call him a modern, recognizing, as we try to, the supreme importance of both body and soul.

MEDICINE IN THE ATOMIC AGE

We live in the atomic era, "when all men shall be cremated equally." There is no telling what atomic science may provide for man's well being.

We already feel the hypertensions in the expansion of crowded cities, the burst of population, the development of automation, threatening man with unemployment. Social problems galore both confront and baffle us in medicine and in religion. Already they are beyond the scope of so-

cial welfare and law enforcement. City, state, and national agencies have already come in. Each social problem involves medicine and treatment. Maladjusted individuals are a direct challenge also for the minister. But are these social problems, or health problems, or religious problems? We men who serve others can no longer demarcate our provinces. We unite our efforts to derive the added strength we need for the demand of service. Medicine and religion must grow with reciprocal respect for each other, as well as in awareness of the task confronting us.

The curtain between mind and spirit is thin and often transparent. Who can distinguish between the sense of guilt, the domain of the psychiatrist, and the sense of sin, the minister's precinct. Do hopelessness and despair, loneliness and rejection, depression and obsession fall in the mental realm or the spiritual realm or both? Sooner or later it is malady or disease.

Grief, a serious problem, induces neglect both of one's self and dependents. The grief stricken do not eat, nor sleep, nor care. They wish to live alone in a world both past and empty. Changing mourning customs show that most try not to live that way. The others become the problem that religion must face with the teaching of life and that no one escapes the reality of either joy or sorrow.

The minister would say to the spiritually depressed, "You are never alone," and to the sin laden, "God does not want the death of the sinner but that he turn from his way and live" (Union Prayer Book, Vol. II).

This case of paralyzing grief comes to mind. A man was brutally murdered in his place of business. His wife was taken to the hospital where she was promptly put to sleep. I advised against her presence at the funeral. The next thing I knew she was wheeled into the parlors for the service. She had been treated, if not mistreated, by her physician. She sat dumbly in her wheel chair, never shifting her gaze. I resented this treatment, coupled with her presence at the funeral. She told me afterward she remembered nothing. She should have slept on in the hospital if there was such need, and not sent out, a crippled mind, even to her husband's funeral.

The minister faces the harshly self-imposed depravity of those who feel utterly rejected. We try to din into the ears of "those who have lost their way in the world," as our Prayer Book puts it, the thrice repeated Biblical injunction: "There is no man so righteous that he doeth well always, and sinneth not." But ministers can no more expect their therapy to work infallibly than can the physician. We also work in the dark. We can point out the Biblical pattern that the Scriptures do not set forth one perfect, nor wholly righteous character. David knew he sinned, after sending Uriah to his death. He felt no compunction for Uriah, but said, "Against Thee, Thee only, have I sinned." Religionists teach that to err is human, to help ourself—and others—is divine.

Here is a problem of a man's inability to pray. One recently, bent double with such pain that he fainted twice during our interview, told me: "If only I could pray, but I can't. I can bear the pain, but I can't pray." And he wept. These patients are still medical charges, but they also need reassurance and confidence in God and self. It matters very little whether the physician is a believer or a scoffer. Doctors, too, must occasionally say: "Let's try this. It can do no harm."

There is that twilight zone which the doctor can be expected to serve only in passing with a pat on the back or perhaps a sedative. These are the peripheral patients, the kith and kin, heavily charged with responsibility when the prognosis is black, the illness long, and the doom pending. They want to be heroic, they are but human. Today, medicine can prolong what nature might more speedily terminate. This but increases the need of the family for ministration.

One of these peripheral cases is removed from both sorrow and illness. He was an alcoholic. His parents, his married sister's family, and his wife were threatened with financial ruin, desperation, and humiliation. The ironic tragedy mounted while the man staggered blithely on his way. Doctors threw up their hands, social agencies and AA ground to a stop, friends were helpless. He would not cooperate. That was a few years ago. He still lives in his dream world of spirits, not spirit. His wife left him, his parents are in their grave, neither his family nor any agency has anything to do with him. I am still asked, "Can't you do something?"

THE SIN OF OUR TIME

Judaism's teaching is that God constantly reveals His mysteries through the discoveries of science, which man perfects for the benefit of all men. Our morning prayer says, "each day God creates anew the world!" It is meaningful to offer this promise of renewal to the hopeless each morning and each morning after that. The sin of our time is that the spiritual incentive and aspiration in man has not kept pace with his fertile mind and achievements. We speak about life on

the moon, but we have not learned to live together on earth. We might suddenly stop, as did the native carriers in Africa, refusing to budge another step with the fast-paced safari. "We rest to let our souls catch up with us," they explained. But we men cannot rest, although the soul of our age is far behind.

We turn from this multi-magnified cosmo-scope to a telescopic, no, a microscopic slide, and there, always, is the man who needs us. Each one is real, even as you and I. When we face him we face our responsibility. It is not less for the minister than for the doctor. Once religion was dogmatic. Today, it is positive, but still humble. It does not dispute with medicine, nor belittle its treatment. Science makes mistakes and corrects them. Witness last winter's fears of one new drug already on the market. Religious teachers also are constantly questing and refining. Religion still seeks greater knowledge of the truth to justify the ways of God to man.

There is no absolute knowledge. Isaac Newton said he had been only a boy, finding now and then a smoother pebble than ordinary, while the ocean of truth lay undiscovered before him. Knowledge must always be filtered through finite and fallible intelligence. The only changeless constant is man's responsibility for his fellowman, and that is sacred both to medicine and religion.

The doctor in his heart knows, as David knew, "we are fearfully and wonderfully made." Whether he believes this human laboratory, the most wonderful of all, with its exciting auto-therapy, its growth and decay, its powerful nerve distributing center, and its marvelous blood circulation system; whether he thinks this body is a mechanical plant, or a chance combination of bone, tissue and muscle, with organs thrown in for good measure; whether he sees this body, ferrets its mind's secrets, fathoms its spiritual needs and professes to understand one-one thousandth of its coordinating functioning; whether he feels human kinship or thinks of a man as a case, and himself the technician to study it, he does acknowledge his chosen profession in which he ministers, heals, cures, and helps. This he does for the benefit of another. In my profession we call such service dedicated. Dedicated to human life, to our fellowman. Such dedication can not be merely for the practitioner's ego—whether he is doctor or minister. Maimonides said, "There is no health for the soul, unless that of the body is secured." Together we treat, whatever the disease. All of them are sacred, as Hippocrates inferred. They are sacred because they are in other men. Sacred because, together, doctors and ministers are responsible for man's physical being, mental health, and spiritual life. ★★★

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Acknowledgment is made for certain historic references to Dr. Joseph Izenstark, Tulane University Medical School, New Orleans.

GOODBY, MISS JONES

Next victim of the automated age may be the secretary. Her substitute, a highly efficient gadget now being groomed with intensive training at Cornell University, has already been taught to think, sit in on conferences, and type out a complete record of the meeting. According to Frank Rosenblatt, director of Cornell's cognitive systems research, work is now being done to give the machine the capacity to answer questions verbally (and respectfully); it could even be made to display emotions if a temperamental secretary is required. Mr. Rosenblatt predicts that within the next five years the machine will be ready to perform *all* of the secretary's duties, along with those of the receptionist. Though initial cost would be high, word is the machine would "learn" on the job, modifying its own internal structure and constantly improving performance via experience, with no time off for coffee breaks or office romance. *The Insider's Newsletter*

Our Neighbor's Faith

THE MOST REVEREND JOSEPH B. BRUNINI, J.C.D.

Jackson, Mississippi

As modern man goes into outer space searching for new worlds and possibly new peoples, he carries with him an appalling lack of knowledge about his earthly neighbors, begins Bishop Brunini. This is especially true in the area of religion, he continues. Congratulating AMA and MSMA on their efforts to bring medicine and religion closer together, the Catholic clergyman points out that seminars such as MSMA's are fulfilling a long-time need. He suggests that such programs should be implemented on the county level. In closing, Bishop Brunini challenges physicians, as men intelligently interested in the whole man, to assist clergymen and civic leaders in meeting the many social problems of today.



BISHOP BRUNINI

TODAY MAN IS PROBING the vast regions of space. As we meet, Astronaut Cooper is in orbit scheduled to break all American records for travel in space. We look forward eagerly to the possibility of encountering beings on other planets, and yet we know so little about our own neighbors. The lack of religious knowledge in the United States is truly appalling. I feel that my distinguished colleagues on the panel share this distress with me. We know so little about the other man's faith, about what makes him "tick," about what gives him spiritual assurance, calmness of soul, and so forth. We may have a general idea of the faith of our neighbor, but this is truly superficial.

Every patient needs strength of soul as well as strength of body. The growing number of mental patients in our country cry out for a better understanding of the needs of our people. Besides our mental patients, we have our many heart disease victims. Dr. Tinsley R. Harrison of the Medical College of Alabama, in speaking recently before the Mississippi Heart Association Convention in Jackson, stated that "*fear* is the *chief* suffering of heart victims." Fear is a *spiritual* thing, a matter of the soul, a matter involving the faith of the victim. Certainly physical treatment would be only part of the prescription for such patients.

At this point I would like to quote from one of the most distinguished books ever written by a man of medicine. I refer to "Man the Unknown" by Dr. Alexis Carrel, and the following extract is found on pages 42 and 43 of the 52nd edition published in 1935. (The 59th edition is the latest.) Dr. Carrel, a recipient of the Nobel prize, cooperated with Lindbergh in the invention of the artificial heart.

". . . Man must now turn his attention to himself, and to the cause of his moral and intellectual disability. What is the good of increasing the comfort, the luxury, the beauty, the size, and the complications of our civilization, if our weakness prevents us from guiding it to our best advantage? It is really not worth while to go on elaborating a way of living that is bringing about the demoralization and the disappearance of the noblest elements of the great races. It would be far better to pay more attention to ourselves than to construct faster steamers, more comfortable automobiles, cheaper radios, or telescopes for examining the structure of remote nebulae. What real progress will be accomplished when aircraft take us to Europe or to China in a few hours? Is it necessary to increase production unceasingly, so that men may consume larger and larger quantities of useless things? There is not the shadow of a doubt that mechanical, physical, and chemical sciences are incapable of giving us intelligence,

Auxiliary Bishop, Diocese of Natchez-Jackson.

Read before the Seminar on Medicine and Religion, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 15, 1963.

moral discipline, health, nervous equilibrium, security, and peace.

"Our curiosity must turn aside from its present path, and take another direction. It must leave the physical and physiological in order to follow the mental and the spiritual. So far, sciences concerning themselves with human beings have confined their activities to certain aspects of their subject."

A DEEPER KNOWLEDGE

I am sure that most doctors, being well-educated men and women, have a general idea of the various religious beliefs prominent in our country, but I feel that all the clergy would agree that this knowledge could be deepened. Again, doctors and hospital personnel are courteous in every way when our clergy are taking care of the spiritual needs of our patients. As for our Catholic beliefs, I think it would be of interest to know the great importance our Church places on reception of the Sacrament of Baptism. We consider this Sacrament essential to salvation, although the Sacrament may be supplied by a desire to do everything that Almighty God decrees for eternal salvation. As we prepare a patient for final judgment three Sacraments are of utmost importance, namely, the Sacrament of Confession, Holy Communion, and the Anointing of the Sick. The Sacrament of Confession, administered in an oral manner, of course requires privacy between the patient and the administering priest. Catholics believe in the literal meaning of the Sacrament of His Body and Blood. "This *is* My Body, This *is* My Blood" means that Christ is really present in Holy Communion. God comes to the sickroom with His Divine Presence.

The Anointing of the Sick, popularly known as "Extreme Unction" is based on St. James' Epistle: "Is any man sick among you? Let him call in the priests of the Church, and let them pray over him, anointing him with oil in the name of the Lord: and the prayer of faith shall save the sick man, and the Lord shall raise him up, and if he be in sins, they shall be forgiven him." In Catholic belief the moment of death is the most important moment in a man's life because as we die so do we live for all eternity. No matter how far a man has slipped during his life, he can always turn back to his God as long as he can elicit a human act. We are reminded of Christ's parable that the same reward is given to the laborer in the vineyard who came in at the last hour as that given to those who had labored throughout the heat of the day.

A minister, rabbi, or priest must resist, of course, the temptation to play doctor and the doctor should resist the temptation to play theologian. At times we clergymen are distressed to see untrained people deliver themselves on theological matters about which they have very little knowledge. Perhaps this will sound better coming from the pen of Dr. Alexis Carrel rather than from my lips. I quote again from "Man the Unknown," pages 46 and 47:

"The more eminent the specialist, the more dangerous he is. Scientists who have strikingly distinguished themselves by great discoveries or useful inventions often come to believe that their knowledge of one subject extends to all others. Edison, for example, did not hesitate to impart to the public his views on philosophy and religion. And the public listened to his words with respect, imagining them to carry as much weight on these new subjects as on the former ones. Thus, great men, in speaking about things they do not thoroughly understand, hinder human progress in one of its fields, while having contributed to its advancement in another. The daily press often gives us the dubious benefit of the sociological, economic, and scientific opinions of manufacturers, bankers, lawyers, professors, physicians, whose highly specialized minds are incapable of apprehending in their breadth the momentous problems of our time. However, modern civilization absolutely needs specialists. Without them, science could not progress. But, before the result of their researches is applied to man, the scattered data of their analyses must be integrated in an intelligible synthesis."

TO SEE MEN CLEARLY

Recently Dr. George Christian Anderson, a leading Episcopal clergyman and psychiatrist and director of the Academy of Religion and Mental Health, called for a greater understanding among men of medicine and religion if either hope to "see man clearly." His talk was given at LaSalle College where he received a centennial medal for his "distinguished leadership in fostering understanding and cooperation among men of religion, science, and the healing professions."

"One of the great tragedies of our day," Dr. Anderson asserted, "is that too many of our physicians dispense tons and tons of tranquilizer drugs and refuse to sit down and attempt to understand their patients as persons. "Medicine," he added, "is more than dispensing pills. Physicians must understand the basic philosophy of the individual (patient)." "Religion," he charged, "has

all too often made the same mistake, believing it has complete knowledge to understand human behavior. Rather, it needs the support of information from other disciplines." Dr. Anderson also decried what he called the "pathological methods" of some religions, which "through intensive guilt without forgiveness can aggravate or even lead to mental illness." The academy, founded by Dr. Anderson in 1954, now has some 4,000 members, among them more than 10 per cent of the nation's psychiatrists. It has branches in some 70 U. S. cities.

Certainly we would like to see this program of AMA and MSMA implemented on the county level. A panel such as we have gathered here today appearing annually before a staff meeting or before a county medical association meeting will certainly be welcome and, I feel confident, well received.

Some medical staffs invite the chaplains to attend staff meetings. Such an invitation should be decided upon by the administrative and the executive boards of the medical staffs, however. In the selection of chaplains, our experience has been that the basic selection of the priest chosen is more important than any training he might receive later. The character temperaments and the knowledge of the individual selected should be quite manifest before he is chosen for such important work. Chaplains should see to it that they know sufficient terminology to enter into intelligent discussions with the medical staff.

At the present time doctors have reached the point where they are now treating ulcers by deep freeze treatment. I understand that experiments are now being conducted with the idea of putting man himself into a deep freeze. This might be helpful in our explorations of outer space. Men of science will need to ask men of religion concerning the moral and spiritual implications of such advanced notions. Clergymen have a lot to contribute to the analysis of behavioral patterns likely to be encountered as man advances in his knowledge of outer space.

In closing, I would like to challenge our doctors as intelligent lay leaders to assist our clergymen and all of our civic leaders in meeting the challenging problems facing us today. As men intelligently interested in the whole man, we think that you should become involved in the ecumenical movement now shaping up among practically all Christian churches, and, as men of science and men blessed by God with good educations, you should assist our people in meeting in a God-like and scientific manner the racial problems facing us throughout our nation today.

I do want to take this opportunity of expressing on the part of my fellow Mississippi clergymen our deep gratitude to the physicians and surgeons of our beloved state, and indeed to all hospital administrators and all engaged in the care of the sick, for their many kindnesses to the clergy and to the cases of indigent people referred to them. We Mississippians have the lowest per capita income of any state in the union, but many things are done on a basis of neighbor-to-neighbor that are not reflected on our income. And I might mention parenthetically that we don't have to pay income taxes on such neighborly acts.

I also wish to express my appreciation for the invitation to participate in this panel with my distinguished colleagues. Certainly the American Medical Association and the Mississippi State Medical Association are to be congratulated in their efforts to develop cooperative action in the arts of medicine and pastoral guidance and to provide a forum for the discussion of problems and changing ideas and programs of our men of medicine and our men of religion. In setting up this program, doctors are filling a long-time need.

★★★

237 East Amite St.

SLOGAN FOR THE 60'S

A contest to find one line that sums up the foibles of the 1960's as well as "Tennis, anyone?" summed up the frivolous world of the 1920's was held recently in London. Among entries were: "For God's sake, turn that thing off!"; "Did anybody *important* call?" and "How many calories in this?" Winner was the chilling statement: "There's a man outside checking up on something."

The Healing Alliance

THE REVEREND ROBERT P. VARLEY, Th.D.
Salisbury, Maryland

"This is the great error of our day in the treatment of the human body that physicians separate the soul from the body." PLATO

THESE WORDS, while having a contemporary ring, were said over twenty-five hundred years ago by the Greek philosopher Plato. They serve well as an introduction to my words because, first, they demonstrate the fact that man has been concerned with the total treatment of total man for countless centuries, and secondly, these concerns are not too dissimilar to our concerns today.

Pain and physical discomfort have always forced man to seek explanations and comforts outside himself. It is not our purpose to trace man's treatment from the days of tribal incantations to our present medical specializations. Rather, it is to understand the nature of man's current complaints—their origin, effect, and cure. A great percentage of man's illnesses do not begin with germs, or accidents, or material causes. Rather, they are due to the drainage of diseased feelings into the body. Fear, futility and frustration, anxiety and ambivalence, guilt and guile, hostility and loneliness, these all too often are the sources of man's discomfort.

From Plato to the present many avenues have been explored in an effort to answer these human ills. Throughout most of human history the emphasis has been to segment man and to treat only that segment which seems diseased. Particularly since the days of René Descartes, whose philosophy of consciousness was a triumph over the philosophy of the unconscious, irrational will, man has been divided. Man's physicalness was consigned to the physical sciences for care and nurture. Man's spiritualness was assigned to the realms of religion, and each discipline jealously guarded his segment. Cartesian philosophy found

Rector, St. Peter's Episcopal Church.
Read before the Seminar on Medicine and Religion, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 15, 1963.

"Among all the alliances in effect today, none will prove to be more productive and beneficial to human welfare than the alliance of medicine and religion," writes Dr. Varley. The first task facing this alliance for healing, points out the Episcopal clergyman, is to familiarize each discipline with the basic concerns and tenets of the other. Medicine and religion, he concludes, have common roots in their mutual concern for man and thus, theirs is a mutual task.



DR. VARLEY

an ardent ally in Protestant theology with its emphasis of pure consciousness on the one hand and mechanical processes on the other hand.

There are many evidences of this, i.e., Lutheran emphasis on the cognitive side of man's will and Calvin's emphasis on man's moral consciousness. We in America have inherited a moralistic Calvinism which in modern times has become most oppressive. In Roman Catholicism not unlike paths have been followed. There the final resolution was found in the triumph of St. Thomas Acquinas' emphasis on the primacy of intellect over Duns Scotus' insistence on the primacy of the irrational will. Hence in the development of Christian theology, while not officially recognized, a philosophy of dualism has nevertheless ruled.

This accounts in large measure for the antagonism and sometimes open hostility that has existed between the physical sciences and religious philosophy. Today this condition is being reversed, as is evidenced by our meeting today. Once medicine and religion recognized their common roots in their mutual concern for man, the treatment of man was lifted to a broad perspective where we can see not our narrow con-

cerns but our mutual task. Once we mutually seek to heal man's fragmentations, we will see that it is impossible to assign to each discipline fragments of man—there will not be sources of "soul saving" and sources of "body-building." As Dr. Paul Tillich says, "The relationship is not one of existing alongside each other; it is a relationship of mutual interpenetration."

People cannot rely on reason and science and the inevitability of progress to bring about man's total health. The diseased feelings filtering into his body need other medicines. Perhaps the first product which should flow from our realization of the interpenetrating nature of our systems should be a total understanding of modern man. Man is more than an ambulatory bundle of somatic complaints, more than a psyche needing orientation, and more than a soul that needs saving. These are persons—unique and yet common, complex and yet unified.

MAN'S CULTURE

In the realm of immunology, first a culture must be found which will support the organism we seek to isolate. Once the culture is found, the organism can be grown, and finally controlled. So it is with man. He cannot be treated apart from the culture within which he lives and moves and has his being. The advent and rise of such specialties as psychiatry, psychosomatic medicine, and geriatrics support this contention.

What then is the culture which supports the life of modern man? What is the culture which medicine and religion seek to understand? There are almost as many names for this age as there are authors of books. To Auden, ours is "the age of anxiety." To T. S. Eliot, ours is the age of the "cocktail hour," a time of "the hollow men." Dr. Rollo May writes ". . . that the chief complaint of people in the middle decades of the 20th century is *emptiness*. By that I mean not only that people do not know what they want, they often do not have any clear idea of what they feel." These are the ones who come to the office of a physician with a list of complaints garnered from popular magazines or from their next door neighbors.

Dr. Samuel H. Miller observes that "fundamentally speaking, we are all displaced persons in this age. . . . We are migrants spiritually unemployed, picking up an inadequate and temporary job even in the most successful tasks. We have been cut off from the ground of tradition; we are not committed to anything fundamental . . . men are homeless, lonely, in the deepest and most fundamental level of their being. The world as such, socially and politically, is not enough to satisfy such a hunger."

WHO CAN HELP?

Who then can help these spiritual migrants, these aching bodies? Help comes from the healing value of the interest of a professionally trained person to the one in need. Very often physicians are engaged not only in body healing but soul saving as well. By the same token a clergyman may often be listening to a troubled soul whose real complaints are physical. To be certain, there is a clear line of demarcation wherein we can say that this is physical in nature or that this is spiritual in origin, but there is a vast area wherein there are shadings of both and it becomes impossible to separate the two. It is here that the physician and the clergyman can work effectively as partners and not as competitors. An appreciation of the role each discipline plays in seeking man's total recovery will make this an effective team rather than one based on suspicion and distrust.

In reality the most pressing human problems rest in the area of our personal needs, our emotional relationships, and they concern our basic satisfactions. The compartmentalized and mechanized society of our day has robbed man of the personal side of his nature. Man has become an urbanized animal caged in the chaos of his own creation, megapolitan areas held together with ribbons of concrete, concrete canyons which house the monotonous minutia of modern commerce—the life blood of today. Man, as a biosocial animal, is subject to the assaults of many forces. We can never content ourselves with assigning to just one factor the blame for man's condition. Guilt may heighten suffering. Fear may rob a patient of the will to live. Chronic illness may sap his spiritual vitality. The attitude of a patient and his family to a prolonged, and often terminal illness, is determined not by reason but by the faith held by those involved. Also, a physician can never divorce himself from his own standards of moral and social behavior when he is wrestling with the behavior patterns of his patients. Without realizing it, we all impose our gods upon those we seek to help!

Medicine and religion must, with mutual efforts, inject ourselves more fully into the culture within which our people live. Our professional isolation, while producing dramatic strides, cannot adequately minister to man. Those who sit

by your desks, those who kneel in our churches, what are they seeking?

In looking at our culture and its products, over one-hundred years ago Alexis de Tocqueville said, "It provides for their security, supplies their necessities, directs their industry, and subdivides their inheritance . . . what remains . . . but to spare them all the care of thinking and the trouble of living. . . . The wills of men are not shattered but softened, bent, and guided. Men are seldom forced by it to act, but they are constantly restrained from acting. Such a power does not destroy, but prevents existence. It compresses, enervates, extinguishes, and stupifies a people. . . ."

There are cultural cancers far more deadly to society than carcinoma of the body. These cultural cancers creep silently and insidiously over our people day by day. Medicine's ministry and religion's responsibility is for these also. For example, of what value would it be to prolong the life of a man through the use of preventive and therapeutic medical aids if he is consigned to live in a society which denies him personal freedom and individual integrity? Why make a man strong to work in a world which will tell him where he will work, how long he can work, how much he can produce and how much he will receive as the benefits of his efforts? How about pediatric health and world population?

There are countless incidents we can list which show the assault of socioeconomic forces upon the physical, emotional, and spiritual health of man. But the listing of statistics proves valueless. In fact, many men use statistics much as a drunk uses a lamppost—more for support than illumination. For this reason the first task facing the alliance of medicine and religion is to familiarize each discipline with the basic concerns and tenets of the other. It is not unlike the pseudo-socialist of our day, he likes the individual doctor but dislikes doctors as a group. So it is with religion and medicine. So often the physician likes and understands the individual denomination or minister thereof but is not totally conversant with religion's role in life. The converse of this is also true regarding the clergyman's appreciation of medicine's role. Local forums and high level meetings are indicated.

Secondly, social and economic factors affecting man should be discussed in these forums, based on medicine's investigation of the socioeconomic factors affecting man. Medicine must continue with its programs of research into organic and psycho-pathology. Religion must continue to investigate theological and philosophical forces affecting time and eternity. But neither of us can continue to long ignore the socioeconomic cancers ravaging the productive adequacy of our fellow man.

Among all the alliances and amalgamations in effect today, none will prove to be more productive and beneficial to human welfare than the alliance of medicine and religion. Man receives the gift of life from God, with God ours is the obligation to see that he has life and has it more abundantly. ★★★

St. Peter's Episcopal Church

HELP WANTED

The patient walked into the psychiatrist's office, took out a cigarette, tore off the paper, and began pushing the tobacco into his nose.

The doctor, viewing the act with concern, said, "I see you need my help."

"Yeah," replied the patient. "You got a match?"

No Less of the Science—More of the Art

MILFORD O. ROUSE, M.D.
Dallas, Texas

"We need no less of the science of medicine, but more of the art, and a large measure of the art lies in the spiritual capacity of individual physicians," writes Dr. Rouse. The Dallas internist points out that "any physician who has studied with an open mind the wonderful construction and function of the human body must come to the conclusion that a Supreme Power and design is behind this world." He challenges physicians to fulfill their responsibility to the physicians of the future, both medical students and potential students. "It is more than ever imperative that we maintain examples of spiritual and personal integrity as these students make 'case studies' of our individual lives," he concludes.



DR. ROUSE

IN THE PROBLEMS OF HEALTH the physician needs an active working partnership with a number of other persons. These include his fellow practitioners, the members of the Women's Auxiliary, paramedical groups, other professions, particularly law and journalism, and governmental agencies. But above all he needs a working partnership with God Himself.

How fitting it is that in recent years there has been a tremendous interest shown in all media of public communication—newspapers, periodicals, radio and television, seminars and forums—on the relationships of medicine and religion. Obviously medicine and religion are drawing more closely together, possibly because only in science and the soul is there refuge from nuclear destruction. As will also be mentioned, another possible answer is the growing recognition of the worth, the dignity, the needs, and the rights of the individual man, as well as the necessity for treating man as a whole.

Genesis tells us that man was created in the image and likeness of God, and in Psalms 139: 14, we read, "For I am fearfully and wonderfully made," pointing to man as the acme of God's creation. Twice in I Corinthians, Paul speaks of our bodies as being "Temples of God."

Before the fall of Man in the Garden of Eden, there is no mention of disease, nor sorrow, and soon after man and his mate yielded to temptation for the first time are mentioned pain and death. Ever since the fall of man, there has been an endless effort to restore him spiritually and physically.

As has been pointed out, the words, "health, hale, whole, and holy" all come from the same Anglo-Saxon root, with the provocative thought that in healing man and making and keeping him whole, there is a definite connotation of holiness, or a state worthy of spiritual worship. It is not surprising that in the early centuries the priests, or "Holy Men" took the lead not only in religion but also in healing. Typical examples were in the aboriginal Indians of North America and among the African tribes. Significant was the fact that such priests-healers treated the whole man, a concept we are now recognizing increasingly.

Especially from the time of the Greeks, the professions of medicine and the ministry drifted apart to the point that in the Middle Ages there was a regrettable conflict in many areas between science and religion. Encouraging is the fact that in recent decades these two groups have displayed parallel and mutual objectives and have recognized overlapping interests and responsibilities. In-

Vice Speaker, House of Delegates, American Medical Association.

Read before the Seminar on Medicine and Religion, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 15, 1963.

cidentally, medical history is replete with outstanding examples of men of science, particularly physicians, who have unashamedly avowed a simple faith in God and in His work in the creation and the maintenance of the world and of the inhabitants thereof. It is my humble opinion that any physician who has studied with an open mind the wonderful construction and function of the human body and the unmistakable evidence of the relationship of spiritual and mental factors on the function of the human body comes to the inevitable conclusion that a Supreme Power and design is behind this world. Certainly, after even a short practice, a doctor acknowledges to himself the evidence of the personal power and influence of God in the individual lives and health of men. It has been said that there were no atheists in the foxholes of modern warfare. Similarly, I cannot conceive of atheists in the operating room where a life hangs in the balance, or in the delivery room where the perpetual miracle of birth is evidenced.

UNMISTAKABLE EVIDENCE

Every physician in medical school, hospital, and private practice has seen unmistakable evidences of divine will and planning in life, when of two patients with similar symptoms, physical conditions, and therapy, one survives, one succumbs. Every physician also doubtless can recall instances in which the change for the better in a patient came when something was done to change the spiritual life of the patient.

A true physician, therefore, conceives of himself as being an instrument in the hands of God. A hospital in France correctly phrases it with a motto over its gateway: "I dress his wounds; God heals him." It was one of the greatest physicians of all time, Dr. William Osler, who said, "Nothing in life is more wonderful than Faith—the one great moving force which we can neither weigh in the balance, nor test in the crucible."

I would hope that every physician has the feeling, as do I, that God has a plan for the life of every individual. I believe that God's particular plan for me is in the field of medicine. I recognize my own physical and mental limitations in the practice of medicine, but I also have the conviction that my little best, plus the direction of God, is all that is expected of me. In all simplicity and humility, I want to state that not for one second would I have the temerity to attempt to practice medicine without the personal feeling that I can depend on God to guide my efforts if I do my simple best and daily practice the recognition of the presence of God. In closing this part of my remarks, I would express a personal hope that every physician would have such a personal, practical, working religion that he will feel just as much at home talking to a patient about things spiritual as he would in talking about things physical. Our minister friends are happy to aid, as I will mention later, but every doctor should be able to point out the way to patients who are groping in spiritual darkness, as well as in physical plight.

RELIGION'S INTEREST

The members of the profession or calling of the ministry have always had a great interest in the field of sickness and health. The man who is ill and recognizes the possibility of approaching death is sincerely interested in thinking about his soul and is ready for the kindly ministry of a clergyman. When a patient is approaching a serious operation, or has to face the reality of a lingering physical disability, the wise minister can be of incalculable service in building up courage in the patient and establishing an excellent rapport with the doctor who has the professional responsibility of the patient. And certainly when a patient is facing an exodus from this life, the minister feels a wonderful opportunity of God-given service, which extends to the family even after the physical case is closed.

There has been a heartening manifestation of interest by clergymen in practical ministrations in hospitals and in mutual discussion of problems of health with physicians. Witness the American Foundation of Religion and Psychiatry, in which Dr. Norman Vincent Peale is a moving figure; the National Academy of Religion and Mental Health, composed of 400 clergymen, 400 members of the American Psychiatric Association, 300 psychologists, sociologists, and other laymen; and the Institute for Pastoral Psychiatry at Bellevue Hospital in New York.

In the Texas Medical Center in Houston, the Institute of Religion is a practical demonstration of collaboration of medicine and the clergy. The Institute of Religion, sponsored originally by the Greater Houston Council of Churches, provides practical courses in ministry to the sick for students from five theological schools in my state. As a corollary, elective courses in religion are given to medical, dental, and nursing students to help them learn about the resources the church can offer them in their practice. As you will doubtless hear later, dozens of hospitals in our country (many of them mental hospitals) have clergymen and seminary students receiving pastoral training in actual contact with the sick and dying. Increasing numbers of symposia or seminars, such as this one, are being held for clergymen and physicians

to discuss problems of mutual interest. One of our panel members today is Dr. Paul B. McCleave, director of the Department of Medicine and Religion of the American Medical Association, whose gratifying and successful ministry has been reviewed with you.

Clergymen and physicians alike admit that there are numbers of instances of clinical improvement and cures which can be explained only on spiritual bases. God does not now usually manifest his miraculous powers in the sudden supernatural experiences as described in the Bible, but it is logical that He use His ministers and physicians in this day and time to effect cures and changes that are truly as miraculous as in the old days. The response to antitoxin of a child at the point of death from diphtheria is truly a miracle, as also are the results of the many difficult surgical procedures of this day, even on the heart itself.

Ministers and physicians alike are interested in the possible harm to the public from "faith-healers," most of whom are flamboyant cultists, collecting millions from elaborate radio, television, and tent performances. God expects the exercise of faith on the part of the patient toward his physician, and toward God, and on the part of the physician toward God as he studies each individual problem and outlines the therapy, medical or surgical.

In review, it is heartening to see the minister sincerely desiring a place in the health team of today and being cordially welcomed by the physician as an essential part of this health team. All of this results in the individual's growing respect for his doctor and clergyman as personal guardians of his well-being, rather than just personal judges of human traits.

And now a few thoughts in closing. Students of history readily acknowledge that the teachings of Christianity, in which are emphasized the dignity and the worth of every individual, have had most to do with the development of the true principles of democracy, in which the rights and privileges of every individual are upheld. In recent decades, there has been a tragic tide toward the subjugation of the rights of the individual to the ever encompassing encroachment of central authority or power—a "creeping paternalism" under the guise of the so-called "welfare state"—that bids fair to wipe away the rights of the individual "little men." I trust that it will not be regarded as sacrilegious when I point out that the medical profession in the United States is one profession that has up to now remained a bulwark in opposing this trend toward centralization of power. Perhaps it is the intrinsic feeling of the physician that he owes his most humble patient the utmost skill and devotion that actuates the physician to resist any undue infringement of the rights and principles of the individual citizen. Ambitious, power-hungry politicians will continue their relentless attack to take away more and more individual liberties. Physicians will need more and more of the spiritual strength that alone can temper them with the unyielding courage necessary to carry on the struggle. Here again, the possession of a personal working religion by every physician could easily determine the difference between continued freedom, intellectual and political, and virtual enslavement.

The physicians of the future, medical students or potential students, constitute a great responsibility to the medical profession. We have always given freely of our time and of our personal example to student physicians. It is more than ever imperative that we maintain examples of spiritual and personal integrity as these students make "case studies" of our individual lives. A valuable addition to the faculty of every medical school would be a student counselor, a man of great wisdom and understanding, who would be capable of winning the confidence of every student and guiding him in the development of personality and spiritual power while he develops his scientific acumen. We need no less of the science of medicine but more of the art, and a large measure of the art lies in the spiritual capacity of individual physicians.

And may I leave with you a prescription for me, for you, and for our patients, from III John 1:2: "that you may prosper and be in health, even as your soul prospers." ★★★

1719 Pacific Ave.

MESSAGE FROM MOSCOW

A DEW Line outpost, 1,400 miles north of Winnipeg, Canada, which is supposed to give early warning of approaching enemy planes or missiles, recently received a radio message from Moscow saying—correctly—that one of the lights on its landing strip was out.

Clinicopathological Conference XLIV

Conducted by the Department of Pathology
Mississippi Baptist Hospital
Jackson, Mississippi

The patient in CPC XLIV is a 56-year-old Negro female who was admitted to the Baptist Hospital with the chief complaint of pains in the left side of the abdomen. She was nauseated and had vomited several times. She had some frequency of urination but no complaint of dysuria and no other gastrointestinal symptoms.

Discussers are Drs. Julian Wiener, Louis Schiesari, Elmer J. Harris, Frank A. Wood, Clinton E. Wallace, T. E. Wilson, and Onnie P. Myers.

THIS 56-YEAR-OLD colored female was admitted to the Baptist Hospital on Feb. 22, 1963, with the chief complaint of pains in the left side of the abdomen.

The patient had been in good health until about one week prior to admission when she began having vague abdominal pains localized in the left upper quadrant and the left CVA region. This discomfort gradually increased until about 24 to 36 hours prior to admission when she started having very severe sharp pains in this region, was nauseated, and vomited several times. She did have some frequency of urination but no complaint of dysuria and no other gastrointestinal symptoms. The pains were described as being colicky in nature with radiation into the back and the left lower quadrant of the abdomen. There had been no history of gross hematuria. She gave no previous history of renal difficulty but from time to time had been seen because of mild gastrointestinal symptoms of irritation, dyspepsia, and occasional constipation.

HISTORY

About 10 years prior to this admission the patient had undergone surgery at the Baptist Hospital for an intestinal obstruction. There had been no other operations, and she had never been pregnant. She had had the usual childhood diseases without sequelae. She had been mildly hypertensive for the past several years, but a review of systems did not indicate any marked elevation of blood pressure within the recent past. There was no family history of diabetes or tuberculosis, but the patient's mother had had cancer of the breast.

The patient was seen in the office the day of admission in the early morning when she stated the pain had become so severe through the night that she would break out in cold perspiration. Her symptoms are outlined above. On physical examination the only abnormal finding was a questionable ballottable mass in the region of the left upper quadrant with a few WBC's and RBC's in the urine. Blood pressure was in the range of about 170 to 180/90 to 100. She was admitted to the hospital that day because the pains persisted, and it was felt that she possibly was attempting to pass a urinary calculus.

On admission the blood pressure was 180/100, the pulse 100 per minute, the temperature 98.6, and the respiration 18 per minute. The patient was a well-developed, obese, Negro female who looked ill and complained of pains in the left upper quadrant but who was in no acute respiratory distress. Examination was essentially normal except for the abdomen which again revealed the "questionable" mass with bowel sounds active. There was no rebound tenderness or rigidity.

LABORATORY DATA

A urinalysis showed 3+ albumin and 3+ sugar. There were 4-6 WBC/HPF and 10-12 RBC/HPF. The patient's white blood count was 18,250 with 3 monocytes, 9 lymphocytes, 82 segmented neutrophils, and 6 bands. The hemoglobin was 13.0,

and the hematocrit was 40 vol per cent. The amylase was 87 units, bilirubin 0.3, calcium 10.7, glucose 168 mg per cent, alkaline phosphatase 4 units, phosphorous 3.8 mg per cent, BUN 18 mg per cent, SGOT 28 units.

A KUB film did not reveal any abnormalities, but an IVP indicated no kidney function on the left side with an enlarged kidney shadow. No stone was identified.

HOSPITAL COURSE

The patient was apparently doing well after admission until the day of the 24th when she had an elevated temperature and passed approximately 200 cc. of dark, bloody urine. She complained occasionally of pain, but it was much less severe than on admission. On the evening of this day it was noticed that she had become disoriented, and about 11:30 that night she fell out of bed because of this disorientation. Soon, thereafter, her temperature began to go up, disorientation continued, and she became very stuporous and then comatose. Her temperature continued to rise until it was registered on one occasion to be 111 degrees. After the use of a thermal blanket it dropped to 109 degrees. The patient expired at 2:45 a.m. on Feb. 25 having never regained consciousness.

Dr. Julian Wiener: "We'll just read the protocol over together. I've been over it, and unless I get a lot more information from the discussion here, I can assure you it's strictly going to be guesswork as to whether I get the right diagnosis or not.

"This 56-year-old colored female was admitted to the Baptist Hospital on Feb. 22, 1963. She complained of pain in the left side of the abdomen, stating she had been in good health until one week prior to admission when she began having vague abdominal pains localized in the left upper quadrant and the left CVA region. So at this point we don't have any idea of the cause of pain or whether or not it is renal.

"The pain gradually increased until 24 hours to 36 hours before admission when it became severe and sharp. She had nausea and vomiting. She did have some frequency of urination but no complaint of dysuria and no other gastrointestinal symptoms except for the nausea and vomiting. The pains were described as being colicky in nature with radiation into the back and the left lower quadrant of the abdomen. There was no history of gross hematuria. So at this stage I think that there was some smooth muscle type of pain, either intestinal or ureteral.

"There was no history of previous renal difficulty. From time to time she had had mild GI symptoms of irritation, dyspepsia, and occasional constipation. Any of these could come from the urinary tract as well as the intestinal tract.

"About ten years prior to this admission she had undergone surgery at the Baptist Hospital for an intestinal obstruction. There had been no other operations, and she had never been pregnant. It would be very helpful if we knew something about the previous history and findings at the time of that surgery and what surgical procedure was done. Do we have any such information?"

Dr. Louis Schiesari: "The old chart was on microfilm, and I looked it up. There was an appendectomy in 1947, and then she had lysis of adhesions two or three times but no resection, and nothing had been removed."

Dr. Wiener: "Well, that was a good try, but it didn't help. She had had no other operations and no pregnancies and had had the usual childhood diseases without sequelae. She had been mildly hypertensive for the past several years, but a review of systems did not indicate any elevation of blood pressure within the recent past.

"There was no history of diabetes or tuberculosis, but her mother had had cancer of the breast. The patient had been seen in the office on the day of admission in the early morning when she stated the pain had become so severe through the night that she would break out in cold perspiration and had the symptoms outlined above. On physical examination the only finding noted was a questionable ballottable mass in the region of the left upper quadrant. If it were a true mass, it might be helpful, but we can't attach too much significance to a questionable mass. A few WBC and RBC were in the urine, but since we don't know whether it was a voided or catheterized specimen, this is not very helpful. Blood pressure was in the range of 170-180/90-100. She was admitted to the hospital because the pains persisted. It was felt that she was possibly attempting to pass a urinary calculus.

"On admission the blood pressure was in the range noted above, pulse 100, temperature normal, respiration 18. The patient was described as a well-developed, obese, Negro female who looked ill and complained of pain in the left upper quadrant. There was no acute respiratory distress. Examination was essentially normal except that of the abdomen which revealed the above mentioned mass "questionable," with bowel sounds active. There was no rebound tenderness or rigidity. In view of the following history one might wonder

whether there was any calf tenderness or any other thing which would later cause fever. Urinalysis showed 3+ albumin, 3+ sugar, 4-6 WBC/-HPF, 10-12 RBC/HPF. Along this line it would be of interest to know if this was a catheterized or voided specimen. Do you know?"

Dr. Schiesari: "No, I don't."

Dr. Wiener: "The few cells and the albumin in a voided specimen in a female of this age does not necessarily mean anything. On 3+ sugar we'd like to know if she had an infusion. Do you know?"

Dr. Schiesari: "Yes, I think she had an infusion"

Dr. Wiener: "She had had an infusion. We don't know whether acetone was present or not. So these findings, though positive, really don't mean very much knowing she had had an infusion and not knowing whether it was a voided or catheterized specimen. She had a white blood count of 18,250 with 3 monocytes, 9 lymphocytes, 82 segmented neutrophils, and 6 bands. This certainly suggests an inflammatory lesion that could be in the urinary system or elsewhere in the body. With urinary calculi, even without infection, sometimes we see an elevation of the white count. Hemoglobin and hematocrit were essentially normal. Amylase was 87, bilirubin 0.3, calcium 10.7, glucose 168 mg per cent. Was that any time near the time she had had the infusion?"



Figure 1.

Dr. Schiesari: "I couldn't say, it's possible."

Dr. Wiener: "If that were a fasting blood sugar, it would certainly be of interest, but if it were taken a short while after the infusion or while she was getting it, it wouldn't mean anything.

"The alkaline phosphastase was 4 units, phosphorous 3.8 mg per cent, BUN 18 mg., SGOT 28. None of those findings are very suggestive of anything to me. Do you know if a serum uric acid was done?"

Dr. Schiesari: "It was not done."

X-RAY DATA

Dr. Wiener: "A KUB film did not reveal any abnormalities, but an IVP indicated no kidney function on the left side with an enlarged kidney shadow (Figure 1). No stone was identified. These films were made on Feb. 23, a day after admission. This is a flat film, and we can see the bladder —full bladder, it appears on flat film. There is mention of an enlarged kidney shadow. I am not sure that I see an enlarged kidney. There is certainly a suggestion of something high on the left, but I don't see any definite shadow. If there is one, it isn't markedly enlarged. IVP showed prompt function with what appears to be normal findings on the right. There is not real good contrast but adequate. A little fullness of the lower ureter on the right is noted compatible with the full bladder. There are serial films being taken up to one hour, but none of them show any more than this, in my opinion. Would the radiologist like to comment on these?"

Dr. Elmer J. Harris: "I think you've covered the subject. You may see the kidney shadow a little better on that hour one."

Dr. Wiener: "The next comment here is that the patient was apparently doing well after admission until the day of Feb. 24 when she had an elevated temperature and passed approximately 200 cc. of dark, bloody urine. This was two days after admission and a day after the IVP's were done. No mention was made as to whether cystoscopy or pyelograms were done."

Dr. Schiesari: "None were done."

Dr. Wiener: "The bloody urine certainly is suggestive that we may have primary urinary tract disease or it could be secondary to other findings. She complained occasionally of pain, but it was much less severe than on admission. As far as we know now, she had had no prior gross hematuria. On the evening of this day, that's still the 24th, it was noted that she became disoriented and after about 10:30 that night she fell out of bed because

of this disorientation. I cannot find any reason why she would become disoriented. There is nothing prior to this suggestive of disorientation unless she became acidotic from the diabetes. When she became disoriented, do you know whether any further study was done to determine the cause?"

Dr. Schiesari: "There wasn't anything done about it."

Dr. Wiener: "Soon thereafter her temperature began to go up, disorientation continued, and she became very stuporous and comatose. Her temperature continued to rise until it was registered, on one occasion, to be 111 degrees. I don't know what kind of thermometer they used for that, but it was a good one. After the use of a thermal blanket it dropped to 109 degrees. The patient expired at 2:45 a.m. on Feb. 25, having never regained consciousness. With her urinary symptoms and the mass and the IVP findings and later passing gross blood, I would certainly think that the most likely thing would be that the pathology was on a renal basis or urinary tract basis. Certainly the most likely thing that would cause pain in the side without function of the kidney on that side on intraveous pyelograms would be urinary calculus with complete or partial blockage. We have not, however, really ruled out a congenital absence of the left kidney. I'd like to be sure she has one despite the suggestion of a renal shadow on this side. The hematuria, of course, would not have to be from the left side, although her pain and symptoms were on that side. Where there is urinary obstruction and infection, this type of fever is not uncommon. Her condition permitting, one would ordinarily suggest trying to get a catheter in to give drainage if this left side were obstructed. With obstruction and infection the fever can go quite high. That's true with or without diabetes. If she did have diabetes, she would certainly be more likely to have this uncontrolled fever.

"No mention was made as to whether she was on any antibiotics or such while she was in the hospital. Certainly with septicemia and liver involvement or brain emboli this extremely high fever could develop. I don't think this would be too hard to explain if the other findings were present. We could have all of these other findings with the obstruction to the ureter being on a different basis. It could be due to an extrarenal mass either periureteral or near the renal pelvis. It could be, of course, a pelvic tumor in the region of the bony pelvis, but these films are not suggestive of it. The female organs or something of that sort could be causing obstruction of the ureter.

"We could have a primary carcinoma of the kidney which could cause pain in the side with hematuria, and we could have obstruction of the collecting system from the mass within the kidney itself, which will give fever with infection. Tuberculosis of the kidney could cause all of this with miliary tubercles and high fever from other complications of it. It could have been a primary tumor of the renal pelvis with obstruction, or of the ureter with obstruction, or even of the bladder obstructing the ureteral orifice. One thing that could have easily caused this would be papillary renal necrosis which we see with diabetes with a slough of a tip of one of the papillae which causes urinary obstruction. Ordinarily one would have expected that she would have fever prior to the slough of it, but it could have been such a low grade fever or a low grade infection even without fever that it was not noticed by the patient.

"The blood count is not suggestive, but it could be renal invasion by some type of lymphoma or lymphosarcoma, or as I mentioned earlier there was nothing said about whether she had any calf tenderness. Actually, thrombophlebitis with emboli could cause pain in the side from the emboli getting into the general blood stream, or she could have had an obstruction of one or both the renal vessels from that with other emboli causing liver infection with the high fever. We don't know any more about the diabetes than what's given here, is that right? Are there any other findings anywhere that would tell us whether these findings are merely incidental?"

Dr. Schiesari: "No, there are none. The attending physician put down everything he knew about her."

Dr. Wiener: "We can't even definitely diagnose diabetes, I think, in view of the fact that she had had an infusion. I think if I had to guess at the diagnosis, I would say she had left ureteral obstruction with pyelonephritis and septicemia. If diabetes were present, I would highly suspect that she had had papillary necrosis with ureteral obstruction from the sloughed tip of the papillae. A nonopaque stone could easily cause obstruction along with the other diagnostic findings."

Dr. Harris: "I don't know if I can add much to it. I wonder if the density at the end of that 12th rib is a real true one or is it artifact. It looks from here like it could be a little stone. Maybe not."

Dr. Frank A. Wood: "It looks like a bowel marking to me."

Dr. Wiener: "Perhaps I should emphasize a little bit more the nonopaque stone that does not show on flat film. Without retrograde studies you don't pick those up. I thoroughly agree she should have had a catheter put up there if there was not

some real contraindication we don't know about. I would think a good bit about an embolic anomaly which was dwelt on involving the renal artery on the left. I think the sugar in the urine was incidental to the infusion."

Dr. Clinton E. Wallace: "How about sickle cell anemia?"

Dr. T. E. Wilson: "I wouldn't think so. She had no anemia, actually. Of course, she could have had sickle anomaly."

Dr. Wiener: "Her death came too fast for that."

Dr. Wallace: "I don't think so."

Dr. Wiener: "Two days, wasn't it? That's pretty fast."

Dr. Schiesari: "Dr. Spell?"

Dr. Spell: "I don't have any additions."

Dr. Schiesari: "Dr. Wood?"

Dr. Wood: "I have no additions. I would judge that she had uremia with final shock."

Dr. Wiener: "She had had no fever until recently, and nothing was mentioned about fever in the doctor's office. My feeling is that the actual fever probably developed after she was admitted. You couldn't say that because, as you know, sometimes they will go by many hours without fever and then spike, maybe twice a day and have high fever. She could easily have had fever before she came in. I don't know that you could rule this out from the history. When you get urinary infection with obstruction, the fever can get extremely high and septicemia develops very rapidly. Relieving the obstruction will frequently break the whole cycle. This doesn't necessarily mean it would, but it could."

Dr. Wallace: "You don't find positive blood cultures very often with gram negative infection from the urinary tract."

Dr. Wiener: "I always look for them."

Dr. Onnie P. Myers: "You can get a positive from the urine culture, but not from the blood. There may be some, but I haven't seen one. Incidentally, I happened to attend a urological seminar in California last November, and it was said that high fever on suspected urinary tract infection justifies the administration of Furadantin, stat, intravenously, regardless of the culture. If you use the disk method, the culture is never satisfactory with Furadantin, but if you use the Titration method, it would be positive. They give the Furadantin, stat, in large volumes of diluents while they are waiting for the laboratory cultures, and the most the fever ever runs is two days. I have a patient at St. Dominic's right now that had a fever of 105 on admission. I gave her two drips of Furadanatin, and the fever is down to normal today."

AUTOPSY REPORT

Dr. Schiesari: "At autopsy a large ovoid mass was easily removed from the left flank. This mass consisted of a thickened, hemorrhagic renal fascia which included an enlarged blackish-red adrenal gland and an enlarged kidney which, when decapsulated, was not remarkable except for a dark-red color. The renal vein measured 1.8 cm. in diameter and was distended by a red, tan, friable thrombus which extended into the smaller branches penetrating the parenchyma. The cut surface of the kidney was red and hemorrhagic with almost complete obliteration of the renal markings, especially in the medullary portion. The right kidney was of normal size and pale, and its cut surface was not remarkable. The renal vein was moderately distended by a firm, tannish-yellow thrombus. The inferior vena cava was not occluded. The microscopic examination confirmed the gross impression, namely, bilateral renal vein thrombosis with infarction of left kidney, renal fascia, and adrenal gland. The right kidney showed only moderate interstitial edema and some homogenous thickening of the basement membrane of the glomeruli.

"After completion of the autopsy we were not able to find any anatomical cause for this condition and had to call it primary thrombosis of renal veins. Primary thrombosis of the renal veins, occasionally observed in dehydrated infants as a complication of acute gastroenteritis, is quite rare in the adult.

"C. V. Harrison and Associates in 1956 defined four varieties of renal vein thrombosis:

"1. Thrombosis of inferior vena cava with secondary involvement of the renal veins.

"2. Obstruction of inferior vena cava and of renal veins or both due to invasion by malignant neoplasm or to external pressure.

"3. Renal vein thrombosis secondary to primary renal disease (glomerulonephritis, pyelonephritis, malignant hypertension).

"4. Primary thrombosis of renal vein.

"In our case one might postulate an intrinsic lesion of the left kidney as the trigger mechanism, but the tissue destruction precluded an adequate study of the histological details. Thus, attempts to find a satisfactory explanation remain purely speculative." ★★★

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Radiologic Seminar XVII: Subphrenic Abscess

ARTHUR T. TUMA, M.D.
Jackson, Mississippi

THE SUBPHRENIC SPACE lies below the diaphragm and above the transverse colon and is divided into upper and lower compartments by the liver. On the left side the lower compartment has two subdivisions separated from each other by the lesser omentum, stomach, and anterior layers of the greater omentum. The posterior of the two inferior subdivisions is called the lesser omental bursa. The foramen of Winslow is the only communication between the lesser omental bursa and the peritoneal cavity.

Infection may occur in any of the subdivisions of the subphrenic space, usually secondary to inflammation elsewhere, such as the appendix, stomach, gallbladder, liver, and thorax. Seventy per cent of subphrenic abscesses are on the right side, 20 per cent are in the left anterior inferior space, 4 per cent in the lesser sac, and 5 per cent in the left superior subphrenic space.

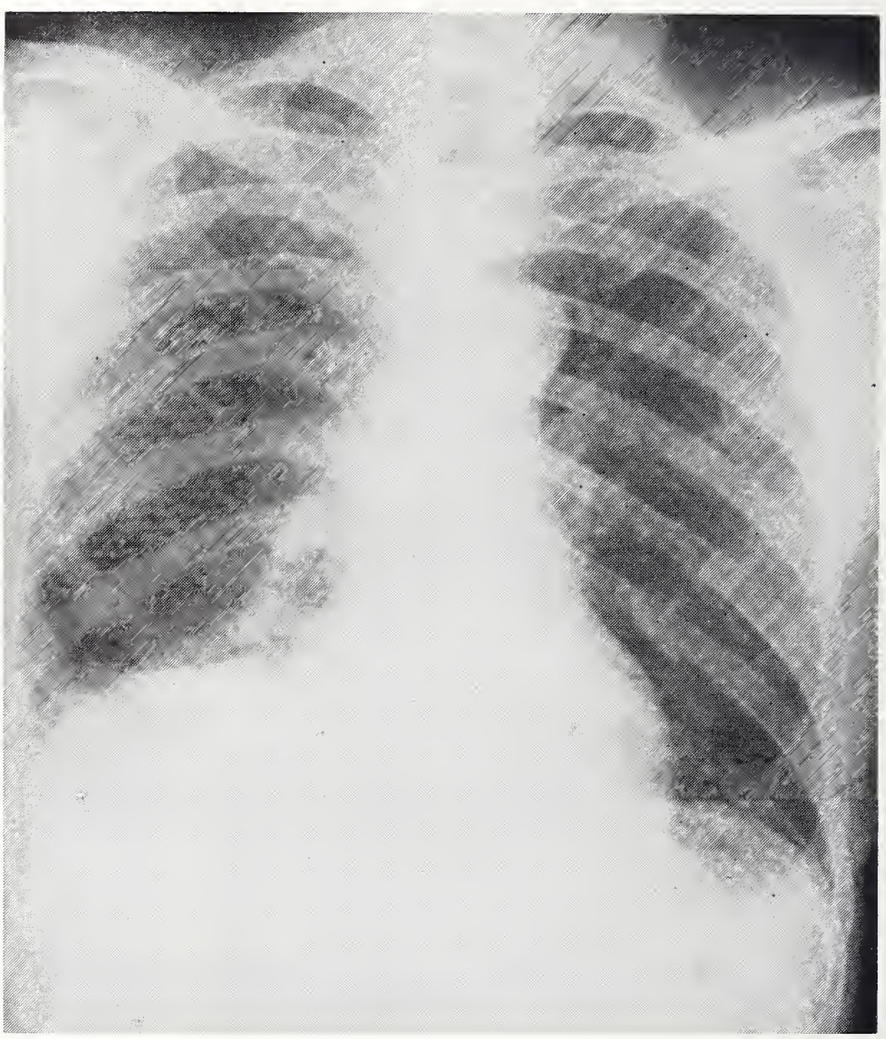


Figure 1. Subphrenic abscess. The right diaphragm is elevated and linear bands of atelectasis are seen in the base of the right lung.

The earliest signs of a subphrenic abscess are elevation of the diaphragm and restriction of its motion (Figure 1). During the postoperative period these signs must be interpreted with caution as they may occur secondary to postoperative pain and distention only. The next change is partial obscuration of the diaphragm by inflammatory pleural reaction secondary to extension of the inflammatory reaction through the diaphragm. The base of the overlying lung is compressed by the elevated diaphragm and plate-like atelectasis, pneumonia, and pleural effusion may ensue (Figure 2). Paralytic ileus may be present in the adjacent bowel. If the abscess is on the left side the stomach may

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, Veterans Administration Hospital.



Figure 2. Film taken 12 days after Figure 1. There is increased obscuration of the right lung base and diaphragm by pleural fluid and pneumonia extending to the level of the interlobar fissure.



Figure 3. An air-fluid level has formed in the subphrenic abscess under the elevated, thickened, right diaphragm. Pleural effusion is seen in the right costophrenic angle.

Infection may occur in any of the subdivisions of the subphrenic space, usually secondary to inflammation elsewhere. Seventy per cent of suphrenic abscesses are on the right side, 20 per cent are in the left anterior inferior space, 4 per cent in the lesser sac, and 5 per cent in the left superior subphrenic space. The author discusses signs and symptoms of subphrenic abscess, radiologic findings, and treatment.

be displaced downward, medially, or anteriorly. Displacement of the liver and spleen may also be seen. Gas formation within the abscess is a late change and air-fluid levels may be demonstrated by upright and lateral decubitus films (Figure 3). Shell-like calcification may occur in association with long-standing subphrenic abscess.

The onset of subphrenic abscess may be insiduous or sudden with fever, chills, nausea, diarrhea, and liver tenderness. An amoebic abscess will produce chocolate-colored pus on diagnostic puncture of the liver. Subphrenic abscesses rarely resolve without draining, and untreated abscesses may drain through the diaphragm into the bronchial tree, or they may rupture into an abdominal viscus. ★★★

1500 E. Woodrow Wilson

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The President Speaking

'Advancing the Art'

JOHN G. ARCHER, M.D.
Greenville, Mississippi

MISSISSIPPI PHYSICIANS have embarked upon a new formal venture in patient care with the initiation of a full-time program in the field of medicine and religion. In this special issue, both the essays of the distinguished members of the pace-setting Seminar on Medicine and Religion and the views of the association are presented. Thus, a practical manual for the program is made available to physicians.

Our Board of Trustees has acted in response to the wishes of the House of Delegates in creating a committee to be concerned with this important program. Many component medical societies of the association may also desire to formalize this program by taking similar action at the local level. Most assuredly, theirs is a great opportunity for physician-clergy communication in the actual locale of patient care.

No recent assertion by medical organization demonstrates more forcefully the dedication of the physician to the care of his patient than the recognition of the need of faith in time of illness. While it is not a matter of proving this dedication, it logically follows that renewed confidence on the part of the patient can and will assist in his care. If for no other reason, which obviously isn't the case, the program has great intrinsic merit.

Within the next calendar year, physicians can expect to receive new and additional information as activities in the field of medicine and religion are extended and objectives are probed in greater depth. It is a challenge to us all, a rare opportunity, and a means by which the art—if not, indeed, the science—of medicine will be advanced. ★★★

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EDITORIALS

The Physician, the Clergy, and the Whole Man

Nothing in life is more wonderful than faith—the one great moving force which we can neither weigh in the balance nor test in the crucible.

—Sir William Osler

I

American medicine has recognized that man cannot be separated into parts for the care and treatment of his illness. He is a whole being and his health is affected by physical, spiritual, mental, and social factors. In ill health, therefore, he requires total care and treatment. The goal of medicine to attain the best of health conditions for all Americans envisions a degree of *rapport* with the clergy that will assure the best care and treatment for individual patients and the highest possible degree of consideration for the needs of patients' families.

The faith of the individual patient is a vital factor in total health. It is not a matter of whether we agree or disagree or accept his particular type or degree of faith. The patient has faith and we must treat the patient within the realm of his faith.

With these words, the American Medical Association has dedicated itself to the high proposition of treating the whole person. To formalize this dedication, it has created a Department of Medicine and Religion which is now working actively in every state of the nation.

There is nothing new in the concept of treating the whole person nor of the physician's recognizing spiritual need in his patient. But there is a dramatically new idea in the employment of medicine's resources to create a proper climate for communication between the physician and the clergyman.

II

At the 95th Annual Session, the Mississippi State Medical Association contributed substantially to this important program by presenting the first Seminar on Medicine and Religion. Now, the six essays read before the seminar become the first to be recorded as such in the literature. To this extent, your Journal, its editors, and staff are grateful for the privilege of presenting this special issue.

Four distinguished theologians and three medical leaders made up the seminar. The Most Rev. Joseph B. Brunini, Auxiliary Bishop of the Diocese of Jackson-Natchez, represented the Roman Catholic faith. The wise and able Dr. Julian B. Feibelman, Rabbi of Temple Sinai, New Orleans, spoke for the Jewish faith. The Rev. Dr. Robert P. Varley, Rector of St. Peter's Church of Salisbury, Md., brilliantly represented the Episcopal faith. The Rev. Dr. Paul B. McCleave, director of the new AMA department, discussed medicine's newest program.

Dr. Milford O. Rouse of Dallas, now AMA's speaker of the House of Delegates, appeared in his

role as chairman of the Committee on Medicine and Religion, while the association's then president, Dr. C. P. Crenshaw, keynoted the seminar. The third physician, Dr. Howard A. Nelson of Greenwood, presided over the special event.

Attendance upon the seminar by physicians, Auxiliary members, representatives of churches and synagogues, and guests eloquently attested to the intrinsic value of this program. Seldom has any subject area been as warmly received at an annual session.

III

What lies ahead in the field of medicine and religion for the association is a challenge to translate this high expression of concern for care of the whole patient into a continuing program which will gain in application and strength. Our Board of Trustees proposed creation of a new constitutional committee whose duties will include supervision of this program. The American Medical Association has announced plans for studies in four areas of physician-clergy relationships.

Under the leadership of the department, AMA will examine hospital chaplain and pastorial clinical education, medical school and nurse education, theological seminary education, and physician-clergy relations in total patient care. The informational exchange which these projects will entail will be useful in eliminating misunderstanding and in promoting greater *rapport.*

Medicine's most recent venture gives Osler's words new meaning and imparts to the art and science of healing a new depth of understanding of those whom we are privileged to serve.—W.M.D.

Exit the Screwworm Fly

Veterinarians, physicians, radiological physicists, entomologists, and livestock experts make up an unlikely task force waging a biomedical war out in Texas. Moreover, this same team is engaged in a even less likely "manufacturing" endeavor: raising millions of screwworm flies which can't reproduce themselves.

Almost any mid- and southwestern cattleman can relate from bitter experience the economic loss wrought by this vicious pest. Growing from larvae which appear to be "threaded"—hence, the name screwworm—the flies deposit eggs in animal wounds with deadly results. From the Mississippi River to the California border, the voracious infestation poses an annual problem in animal health and destroys livestock valued at as much as $100 million in a single breeding season.

At Mission, Texas, the biomedical team is raising over 100 million screwworm flies to maturity each week. Exposed to cobalt-60, the adult insects are rendered sterile and "packaged" for later release in areas of infestation. The sterile flies mate with the fertile, and since there is only one reproduction episode in the fly lifetime, the cycle is interrupted. The concept is no laboratory theory; it was successful in eradicating the screwworm fly from Florida during pilot studies and experimental work in 1959.

The Mission project will enable the release of millions of sterile flies weekly by the team's private air force of more than 20 planes. Eventually, a barrier area between Mexico, the chief source of the livestock scourge, and the southern and southwestern states will be "infested" with sterile flies with the idea of stopping the northern flow of egg-laying killers.

Interesting enough, the project makes use of no agricultural chemicals and the radiation is insignificant as regards human and cattle exposure. All of which has the makings of another biomedical victory for the health research team.—R.B.K.

Medicine's Best Gunslinger

The name of James Henry McLean is all but missing from the annals of medical history. It isn't associated with any syndrome nor tagged to a useful surgical technic. In fact, what little we know about this native Scotsman who settled in St. Louis in 1849 suggests that, as far as his professional endeavors went, he was something of a quack. His contributions to the chemotherapeutic armamentarium of the day included such gems as Dr. McLean's Volcanic Oil Liniment and McLean's Strengthening Cordial and Blood Purifier. Neither is mentioned in any standard pharmacopoeia, needless to say.

But Dr. McLean made his mark in 1880 with the publication of an incredible and immodest treatise entitled "Dr. McLean's Peace Makers," a 200 page proposal "to develop such terribly destructive weapons of war, arms, torpedoes, and fortresses, and such perfect defenses, as would compel all nations to keep peace towards each other." And, indeed, the doctor was well ahead of his time in suggesting new efficiencies in mass destruction. He proposed a 128-shot rifle, a 48-shot pistol, a Gatling-like automatic weapon capable of firing 2,000 rounds a minute, and all sorts of cannon. He designed a capital ship with four

100-ton guns, magnetic naval torpedoes, a forerunner to sonar which he called "Dr. J. H. McLean's Wonderful Hydrophone," and every sort of fort from portable folding iron "pup tents" to air conditioned hunks of metal protruding from strategic coastal sites.

The doctor apparently entertained an economic as well as an altruistic interest in his grand design for his one-man millenium. He advocated that the United States spend $300 million on his armaments in five years and he sent free copies of his book to every head of state in the world. Only the Sultan of Turkey responded, ordering one rifle and one pistol. Somehow, Dr. McLean missed getting into production, although he spoke of organizing "a colossal company capitalized at $20 million."

Not one to undersell his genius, this candid doctor suggested that "he would . . . be entitled to the thanks and gratitude of mankind." Once, the book (by Dr. McLean) mentioned the "profoundly reflective mind and great inventive power" (of Dr. McLean).

History hasn't been kind to the doctor. In addition to ignoring him, it fails to record what effect, if any, he exerted on preventing wars. And, anyhow, he probably made more money from his Volcanic Oil Liniment than from his guns and battleships.—R.B.K.



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"Mrs. Jones? You're right—your husband has got rocks in his head!"

PERSONALS

JACK L. ANDERSON has announced the opening of his office in Natchez for the practice of psychiatry. Dr. Anderson received his medical degree from the University of Texas Medical Branch in Galveston, interned at St. Joseph's Hospital in Fort Worth, and completed his residency in neurology and psychiatry at John Sealy and Affiliated Hospitals in Galveston.

WILLARD H. BOGGAN and JAMES P. HOLLOWAY of Jackson have announced the association of THOMAS H. ARRINGTON in the practice of internal medicine. Dr. Arrington was graduated from Harvard Medical School and took his internship and residency at the University of Mississippi School of Medicine.

JULIUS BOSCO of Pascagoula has announced the association of NICHOLAS DI SANTI in the practice of obstetrics and gynecology. A graduate of Tulane University School of Medicine, Dr. Di Santi completed his internship and residency at Charity Hospital in New Orleans.

LOREN D. BRELAND has opened his office for the general practice of medicine in Crystal Springs. Dr. Breland was graduated from the University of Mississippi School of Medicine and took his internship at Baptist Hospital in Jackson. He has been in the general practice of medicine in Jackson for the past year.

TOM E. BENEFIELD, JR. of Mississippi City has announced the association of JAMES ROBERT HOUSE, JR. Dr. House received his medical degree from the University of Mississippi School of Medicine and interned at Duval Medical Center in Jacksonville, Fla., and the Baptist Hospital in Jackson.

PAUL R. GOOGE of Charleston has been selected by the Mississippi State Department of Education, Vocational Rehabilitation Division, to be Area I medical consultant. The state medical consultant for Vocational Rehabilitation is RUSH E. NETTERVILLE of Jackson.

HENRY BOYD GROCHAU has assumed his duties as radiologist at Kings Daughter's Hospital in Greenville. Dr. Grochau recently completed his residency at the Methodist Hospital in Memphis. He is a graduate of the University of Tennessee Col-

lege of Medicine and interned at the Baptist Memorial Hospital in Memphis.

EUGENE HESDORFFER of Jackson has announced the association of TOM LOUIS, III, in the practice of otolaryngology. A graduate of the Tulane University School of Medicine, Dr. Louis interned and completed his residency at Charity Hospital in New Orleans.

HERBERT H. HICKS and PHIL K. SPRINGER of Natchez have announced their association with JOE D. HERRINGTON in general practice at the Morgantown Clinic. Dr. Herrington received his medical degree from the University of Mississippi School of Medicine and interned at the University Hospital.

PAUL HORN of the Children's Clinic in Greenville was recently awarded a grant to study allergies at Duke University School of Medicine.

WILLIAM CARL KELLUM has completed a residency in internal medicine and cardiology at Ochsner Medical Foundation and is resuming private practice at the Kellum Clinic in Tupelo. Dr. Kellum received his medical degree from Tulane University School of Medicine and interned at the University Hospital in Augusta, Ga. He spent five years in general practice with his father before entering his residency.

BLANCHE LOCKARD and WILLIAM B. WIENER of Jackson have announced the association of CHARLES M. HEAD in the practice of obstetrics and gynecology. Dr. Head received his medical degree from the Medical College of Alabama, interned at the Medical Center in Columbus, Ga., and took his residency at the Confederate Memorial Medical Center in Shreveport, La.

JOHN FAIR LUCAS, JR., has opened his practice in Greenwood in association with his father, JOHN F. LUCAS, SR. Dr. Lucas recently completed a five-year residency in general and thoracic surgery on the Tulane University surgical service at Charity Hospital in New Orleans. He served as chief resident during his fifth year. Dr. Lucas is a graduate of the Tulane University School of Medicine.

BEN MCCARTY has opened his office in Jackson for the practice of ophthalmology. Dr. McCarty received his medical degree from the University of Tennessee School of Medicine, interned at the City of Memphis Hospital, and completed his residency at the University of Tennessee School of Medicine.

ISAAC ALTON NEWTON, JR., has joined the staff of the Gamble Brothers and Archer Clinic in Greenville. He will be connected with the department of internal medicine. A graduate of the University of Tennessee School of Medicine, Dr. Newton took his internship and residency at John Gaston Hospital in Memphis.

R. CARTER O'FERRAL, THOMAS J. SAFLEY, JR., THOMAS K. WILLIAMS, JR., and JAMES R. CAVETT, JR., of Jackson, have announced the association of THOMAS E. STEVENS. Dr. Stevens received his medical degree from the Medical College of Alabama, interned and completed his residency at the University of Mississippi School of Medicine.

KERMIT TILL of Jackson has announced the opening of his office in association with J. R. BANE. Dr. Till received his medical degree from the University of Mississippi School of Medicine and interned at Tampa General Hospital in Tampa, Fla.

GRAYDEN A. TUBB has opened his practice in Fulton. A graduate of the University of Mississippi School of Medicine, Dr. Tubb served his internship at the U. S. Naval Hospital in San Diego, Calif.

LEONARD B. WAMNES, JR., has opened his offices in association with DONALD R. BERRY at the Berry Clinic in Picayune. Dr. Wamnes received his medical degree from the Tulane University School of Medicine, interned and took his residency in general surgery at the Confederate Memorial Medical Center in Shreveport.



DEATHS

BERRY, CHARLES TORBERT, Greenville. M.D., University of Tennessee College of Medicine, Memphis, 1934; interned Kansas City General Hospital, Mo., one year; Fellow, American College of Surgeons; captain, U. S. Army Air Force, three years; died July 14, 1963, aged 52.

HOLLINGSWORTH, SALATHIEL LAMAR, Columbus. M.D., Tulane University School of Medicine, New Orleans, La., 1905; interned Eye, Ear, Nose and Throat Hospital, New Orleans, La., eight months; member, Southern Medical Association; died July 11, 1963, aged 45.

RISHER, PINK CLAYTON, Laurel. M.D., Mississippi Medical College, Meridian, 1908; died July 6, 1963, aged 81.

Book Reviews

Clinical Biochemistry. Sixth edition. By Abraham Cantarow, M.D., professor of biochemistry, Jefferson Medical College, and Max Trumper, Ph.D. 776 pages with illustrations. Philadelphia: W. B. Saunders Company, 1962. $13.00.

Clinical Biochemistry is in its 30th year and sixth edition, the first edition having appeared in 1932. The fifth edition is dated 1955, and the necessity for frequent revisions is obvious. The format of the current edition is quite similar to that of its predecessor, and former readers will have no trouble recognizing an old friend. This book possesses special appeal for the practicing physician who desires to freshen his memory on any abnormal entity having a biochemical basis. The material is presented in a very readable form and reading progress is not hindered by complex structural formulae and purely detailed chemistry. Of particular value to the clinician is the excellent index which composes 83 of the 776 pages in the book and allows one to locate desired information with a minimal expenditure of time. References include some material published in 1961, but it is felt that coverage of current material could have been better. However, this is no serious objection as the book is as current as any of its kind.

The book is quite comprehensive, the first 11 chapters dealing with the normal and abnormal metabolism of carbohydrates, lipids, proteins, nucleic acids, and hemoglobin and porphyrin, and mineral metabolism. The chapter on carbohydrate metabolism is especially good. About one-sixth of the chapter is devoted to general pathways and fate of glucose while the rest considers the factors influencing carbohydrate metabolism, ways of evaluating carbohydrate metabolism, and deviations from normal. The other chapters on metabolism follow the same general pattern. The section on minerals includes calcium, phosphorous, magnesium, iron, sulfur, iodine, and the trace elements, copper, cobalt, and fluorine. The absorption, excretion, storage, function and abnormal concentrations are discussed for each mineral.

Chapters 12-14 compose the section on electrolytes and acid-base balance. The physiological function of water, sodium, chloride, and potassium are first considered and then abnormalities are discussed. The physiological buffer systems are enumerated with a discussion of the deviations in acidosis and alkalosis. Methods of studying acid-base balance are given. As for all methods of evaluation given in this book, the authors present the inherent errors in the methods and recommend the best determinations for information desired.

The majority of the remaining chapters are devoted to the biochemistry of different systems. The systems include the respiratory, renal, digestive, hepatic, and hormonal. Here again the basic biochemistry for each system is described and deviations from normal are presented. Likewise, methods of evaluation are included. The section on hormone assays is excellent and presents the recent advances for hormonal evaluation.

In the field of clinical biochemistry with its rapid growth and turnover, it is difficult for the practicing physician to keep abreast without a good source of reference. This book serves this function well and is highly recommended for this purpose.

LOUIS L. SULYA, Ph.D.

Gastroenterology. Volume I. Second edition. By Henry L. Bockus, M.D., emeritus professor of medicine, University of Pennsylvania Graduate School of Medicine, and present and former colleagues at the University of Pennsylvania Graduate School of Medicine and School of Medicine. 958 pages with illustrations. Philadelphia: W. B. Saunders Company, 1963. $25.00.

The publication of Bockus's *Gastroenterology* 20 years ago constituted a landmark in medical literature. The work long served as an unimpeachable reference source of authority. With the explosive proliferation of knowledge within the past decade, there has been a real need for a new edition. The task of collating and integrating has required a complete reworking of the original work; hence the second edition stands essentially as a completely "new" accomplishment. Volume I (examination of the patient, the esophagus,

and the stomach) has now been released, the other two volumes to make their appearance later this year.

The general format of the original edition has been preserved, but several new chapters have been added. The new volume is larger both in size and length.

Under Dr. Bockus's editorship, the authors are limited to current or former associates at the University of Pennsylvania School of Medicine. The disadvantages of a "one school" approach becomes immediately apparent, as compared to the diversity of background employed in, say, McHardy's current *Gastroenterology*. Despite this drawback, the authors attempt to present all aspects of controversial topics as fairly as possible. A pertinent bibliography appears at the end of each chapter.

The emphasis of the volume is weighted toward the clinical side. In such a monograph, one is surprised to find embryology virtually ignored. The important work being done in electrophysiology of the stomach is not mentioned. The factors affecting gastric secretion and inhibition and the biochemistry of gastric mucus are dealt with much more briefly than the gross and microscopic anatomy of the stomach.

The chapter on the applied anatomy and physiology of the esophagus is exceptionally well done and provides a well-balanced summary of current knowledge in this field. The section on tests of gastric function and gastric analysis is also outstanding. Adequate emphasis is given to studies of parietal cell population and to the maximum histamine test.

From the clinical side, the volume leaves little to be desired. From the early chapters on history-taking, clinical examination of the patient, pain patterns, and symptomatology, to the later chapters in which individual disorders are described, the work is uniformly good. It is especially helpful to find radiographic reproductions and endoscopic views (many in color) of disease processes included as an integral part of each section. One would wish for more esophagoscopic reproductions. There is a good discussion of diseases of the oral cavity. Virtually every known affliction of the esophagus and stomach is considered, each in adequate detail. Each disorder is presented from every possible aspect. Differential diagnosis is adequately stressed. Therapeutic recommendations are first-rate and succinct.

As would be anticipated, consideration of peptic ulcer comprises the bulk of this volume. The topic is dealt with so superbly that this alone would justify the $25 price tag. Every aspect of the disease is so well handled that it is impossible to point to any one outstanding section. Dr. Bockus once again assures us that he does not consider acid the cause of pain in peptic ulcer. All possible assistance is given in the section on therapy. Dietary control, drug therapy, ancillary forms of treatment—all these are fully discussed. The difficult problem of gastric ulcer is thoroughly covered, including cytology. Mention is made of the interesting new drug, Poldine, as well as gastric freezing. It would be helpful to have diagrammatic representation of the various surgical procedures discussed. The chapters on postoperative complications as well as factors affecting prognosis in peptic ulcer are most helpful.

One is impressed that with so much new knowledge appearing so rapidly, it will no longer be possible for a text or monograph to remain "authoritative" for any considerable period. Parts of the work will already be obsolete or disproven by the time of publication, or shortly thereafter. Conversely, the need for standard reference works is greater than ever. In his preface, Dr. Bockus states, "I have tried to include a discussion of all known primary and secondary disorders of the digestive tract and its appendages as fully as is deemed essential to the purpose of the text, i.e., a text which we hope may prove a helpful companion of the gastroenterologist, the internist, and the abdominal surgeon." The editor and his colleagues have succeeded admirably in achieving their goal.

E. L. Posey, M.D.

Books Received

Journal MSMA has received the following books for review. Selections will be made for more extensive reviews in the interest of the readers and as space permits. Further information on the books listed will be furnished on request. Physicians are urged to submit reviews of additional books which, in their opinion, merit comment.

New and Nonofficial Drugs 1963. By the Council on Drugs, American Medical Association. Philadelphia: J. B. Lippincott Company, 1963. $4.00

Handbook of the Practice of Anesthesia. By John R. S. Shields, M.B., Ch.B., associate professor of anesthesiology, Department of Surgery, Washington University School of Medicine, St. Louis, Mo. 203 pages. St. Louis: C. V. Mosby Company, 1963. $6.85.

Handbook of Pediatric Medical Emergencies. Third edition. By Adolph G. De Sanctis, M.D., professor emeritus of pediatrics, postgraduate medical school, New York University—Bellevue Medical Center, New York, N.Y., and Charles Varga, M.D., chief, Department of Pediatrics, the Permanente Clinic and Bess Kaiser Hospital, Portland, Oregon. 457 pages with 85 illustrations. St. Louis: The C. V. Mosby Company, 1963.

Synopsis of Ear, Nose, and Throat Diseases. By Robert E. Ryan, M.D., assistant professor, Department of Otolaryngology, St. Louis University School of Medicine; William C. Thornell, M.D., assistant professor, Department of Otolaryngology, Cincinnati College of Medicine, University of Cincinnati, Ohio, and Hans von Leden, M.D., associate professor of surgery—head and neck, University of California School of Medicine, Los Angeles. 425 pages. St. Louis: C. V. Mosby Company, 1963. $7.50.

Cecil-Loeb Textbook of Medicine. 11th edition. Edited by Paul B. Beeson, M.D., and Walsh McDermott, M.D. 1835 pages. Philadelphia: W. B. Saunders Company, 1963. $19.50, single volume; $23.50, 2-volume set.

Pediatric Cardiology. Second edition. 828 pages with illustrations. Philadelphia: W. B. Saunders Company, 1963. $16.00.

Modern Clinical Psychiatry. Sixth edition. By Arthur P. Noyes, M.D., director, Psychiatric Education, Pennsylvania Department of Public Welfare, and Lawrence C. Kolb, M.D., professor and chairman, Department of Psychiatry, College of Physicians and Surgeons, Columbia University. Philadelphia: W. B. Saunders Company, 1963. $8.00.

Clinical Metabolism of Body Water and Electrolytes. By John H. Bland, M.D., associate professor of clinical medicine, and director, Rheumatism Research Unit, University of Vermont College of Medicine. 623 pages with illustrations. Philadelphia: W. B. Saunders Company, 1963. $16.50.

Counseling in Medical Genetics. Second edition. By Shelbon C. Reed, Ph.D., director, Dight Institute for Human Genetics, the University of Minnesota. 278 pages. Philadelphia: W. B. Saunders Company, 1963. $5.50.

Circulatory Physiology: Cardiac Output and Its Regulation. By Arthur C. Guyton, M.D., professor and chairman of the department, Department of Physiology and Biophysics, University of Mississippi School of Medicine, Jackson. 468 pages with illustrations. Philadelphia: W. B. Saunders Company, 1963. $15.00.

Diseases of the Chest. Second edition. By H. Corwin Hinshaw, M.D., and L. Henry Garland, M.D. 798 pages with 743 pages. Philadelphia: W. B. Saunders Company, 1963. $20.00.

Clinical Examinations in Neurology. Second edition. By Members of the Sections of Neurology and Section of Physiology, Mayo Clinic and Mayo Foundation for Medical Education and Research, Graduate School, University of Minnesota, Rochester, Minn. 396 pages with illustrations. Philadelphia: W. B. Saunders Company, 1963. $8.50.

Results of Surgery for Peptic Ulcer: A Cooperative Study by Twelve Veterans Administration Hospitals. Edited by R. W. Postlethwait, M.D. 308 pages. Philadelphia: W. B. Saunders Company, 1963. $8.00.

Preventive Medicine in World War II: Communicable Diseases. Prepared by Medical Department, United States Army with Colonel John Boyd Coates, Jr., M.C., editor in chief and Ebbe Curtis Hoff, M.D., editor for preventive medicine. Washington, Office of the Surgeon General, Department of the Army, 1963. $6.25.

Organization and Administration in World War II. Prepared by the Medical Department, United States Army with Colonel John Boyd Coates, Jr., M.C., editor in chief, and Charles M. Wiltse, Ph.D., editor for organization and administration. Washington: Office of the Surgeon General, Department of the Army, 1963. $6.25.

Internal Medicine in World War II: Infectious Diseases. Prepared by the Medical Department, United States Army, with Colonel John Boyd Coates, Jr., M.C., editor in chief, and W. Paul Havens, Jr., M.D., editor for internal medicine. Washington: Office of the Surgeon General, 1963. $6.75.

Surgery in World War II. Thoracic Surgery. Volume I. Prepared by the Medical Department, United States Army with Colonel John Boyd Coates, Jr., M.C., editor in chief, and Frank B. Berry, M.D., editor for thoracic surgery. Washington: Office of the Surgeon General, Department of the Army, 1963.



The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

CULLER, OSCAR ZEIGLER, Gulfport. Born Orangeburg, S. C., Feb. 23, 1911; M.D., Medical College of South Carolina, Charleston, 1935; in-

terned Garfield Memorial Hospital, Washington, D. C., one year; residency, Garfield Memorial Hospital, Washington, D. C., one year; elected July 10, 1963, by Coast Counties Medical Society.

HOLMES, JAMES WALTER, Wiggins. Born Martin, Tenn., June 14, 1933; M.D., University of Tennessee College of Medicine, Memphis, 1957; interned Methodist Hospital, Memphis, Tenn., one year; general surgery residency, Methodist Hospital, Memphis, Tenn., three years; member, American Academy of General Practice; elected July 10, 1963, by Coast Counties Medical Society.

JANET, HANSEL, Gulfport. Born St. Landry, La., Nov. 15, 1929; M.D., Louisiana State University School of Medicine, New Orleans, 1958; interned U. S. Public Health Service Hospital, Norfolk, Va., one year; internal medicine residency, Charity Hospital of Louisiana, New Orleans, three years; elected July 10, 1963, by Coast Counties Medical Society.

MIDDLETON, ROBERT HIRAM, JR., Biloxi. Born Shubuta, Miss., April 15, 1929; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned Confederate Memorial Medical Center, Shreveport, La., one year; member, American Academy of General Practice; U. S. Navy, five years; elected July 10, 1963, by Coast Counties Medical Society.

RUSSELL, JOHN FRANCIS, Gulfport. Born Boston, Mass., March 11, 1927; M.D., New York Medical College, N. Y., 1960; interned Somerville Hospital, Mass., one year; residency, Somerville Hospital, Mass., one year; captain, U. S. Army Air Force, three years; elected July 10, 1963, by Coast Counties Medical Society.

State Morbidity Reported Through July 26

The Mississippi State Board of Health reports the following occurrence of morbidity for 1963 through the 30th week of the year, ending July 26, 1963. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	458
Tuberculosis, O.F.	16
Typhoid Fever	2
Encephalitis, infectious	12
Salmonella infections	12
Dysentery	
Bacillary	34
Amebic	8
Food Poisoning, NOS	21
Diarrhea of Newborn	5
Septicemia, Staph.	46
Septicemia, NOS	9
Septicemia of Newborn	3
Meningococcus infection	
Meningitis	18
Meningococcemia	2
Meningitis, O.F.	50
Gas Gangrene	1
Bac. Diseases, other	1
Poliomyelitis	2
Tularemia	2
Mononucleosis, infectious	71
Other Cestode Infest. (HN)	1
Hepatitis, infectious	412
Adenovirus (ARD)	3
Rocky Mt. Spotted Fever	1
Helminthic infections	
Hookworm	749
Ascariasis	242
Strongyloides	36
Cryptococcosis	1
Myelitis	2
Sporotrichosis	1
Generalized Vaccinia	1
Rheumatic Fever	3
Rheumatic heart	5
Histoplasmosis	6
Streptococcus infections	
Scarlet fever	208
Strep throat	1,819
Other inf. and parasitic diseases	1
Pertussis	75
Measles	685
Chickenpox	925
Tetanus	1
Mumps	600
Other complications of small pox vaccination	3
Influenza	32,135
Gonorrhea	3,005
Syphilis	
Early	237
Late	95

MSMA Council on Scientific Assembly Sets Up Fast-Paced Schedule for 96th Annual Session

MSMA's Council on Scientific Assembly, which met July 25 in Jackson, has scheduled four days of meeting activity for the association's 96th Annual Session.

The 1964 meet will be held in Jackson with headquarters at the Heidelberg Hotel.

The council unanimously adopted the following schedule for the session:

Monday, May 11	Afternoon, House of Delegates
Tuesday, May 12	Morning, Section on Medicine
	Afternoon, Sections on Surgery and Preventive Medicine
Wednesday, May 13	Morning, Special Feature, to be announced
	Afternoon, Sections on Pediatrics and Ob-Gyn
Thursday, May 14	Morning, Sections on General Practice, and EENT
	Afternoon, House of Delegates

Dr. C. G. Sutherland, chairman of the council, announced that the deadline for final section programs and photographs of out-of-state essayists would be Jan. 10, 1964.

Those present at the meeting in addition to Dr. Sutherland were Drs. C. M. Murry, Jr., of Oxford, chairman, EENT; Emmett M. Herring of Hattiesburg, secretary, EENT; J. Roy Bane of Jackson, chairman, General Practice; Frank L. Butler, Jr., of McComb, chairman, Ob-Gyn; Mary Ward of Corinth, chairman, Pediatrics; W. E. Noblin of Jackson, secretary, Preventive Medicine; Eugene A. Bush of Laurel, chairman, Surgery.

Dr. John G. Archer of Greenville, president of MSMA also attended the meeting.



Members of the Council on Scientific Assembly met July 25 to plan the 96th Annual Session. From the left are Drs. Ward, Murry, Archer, Sutherland, Noblin, Bush, Bane, and Butler.

MSMA Represented At Jackson Airport Dedication

Mississippi medicine was represented at the recent dedication of Jackson's new $12.5 million jet-age airport. Dr. John G. Archer of Greenville, MSMA president, was among the distinguished guests at the July 24 occasion.

Ceremonies officially opening the new terminal building and field were conducted during the morning with Congressman John Bell Williams, chairman of the House Aeronautics and Transportation Subcommittee, delivering the dedicatory



Senator John Stennis, left, and MSMA President John G. Archer pause to discuss the new Jackson jet-age airport during dedication ceremonies. Scene is north concourse at upper level of air terminal.

address. Senator John Stennis was principal speaker at the dedication of the Mississippi Air National Guard facility.

An estimated 30,000 persons witnessed the ceremonies and saw an air show by the Navy's famed Blue Angels, Pensacola-based precision flight demonstration team.

The airlines terminal building is designed to serve air transportation needs of a city of 500,000, according to Mayor Allen C. Thompson, for whom the new airport is named. It is located on a 2,000 acre tract in Rankin County, immediately east of Jackson. The field features jet runways and facilities and is served by three airlines. Delta plans to initiate jet service from Jackson east to the Washington-New York area and west to Dallas and California in October.

Thompson Field is also headquarters for the 183rd Aeromedical Transport Squadron which is housed in a new $2.7 million military facility. Dedication of the military base was conducted in



Dr. Jim B. Barnett of Brookhaven, chairman of the Mississippi Aeronautics Commission, shows his guest, Dr. Malcolm E. Phelps of El Reno, Okla., the new Air National Guard facilities.

noon ceremonies following a luncheon for distinguished guests in the giant hangar.

Among Mississippi physicians participating was Dr. Jim C. Barnett, Brookhaven, chairman of the Mississippi Aeronautics Commission. His invited guest for the occasion was Dr. Malcolm E. Phelps of El Reno, Okla., a member of the AMA House of Delegates and an aviation enthusiast.

Dr. Archer said that the new airport is "something in which every Mississippian can take pride because its development focuses new importance on our state's growth and progress."



"It's a fine base, colonel," says President Archer to George M. McWilliams, commander of the 183rd Aeromedical Transport Squadron, Mississippi Air National Guard, after inspecting new military air facilities.

Dr. Gillespie To Head State Leukemia Committee

Dr. Guy T. Gillespie, Jr., Jackson hematologist, has been named to head the special Leukemia Committee formed by the Mississippi Division, American Cancer Society.

"It is the hope of the state division that the formation of this Leukemia Committee will provide steps to expand services already afforded leukemia patients and their families," said Dr. R. H. Fenstermacher, Vicksburg, division president.

Members of the Leukemia Committee, which will include both laymen and physicians with a special interest in the disease, are: Dr. Warren N. Bell, Jackson; Dr. Guy P. Sharpe, Jr., Greenwood; J. L. Young, Jackson, and Dr. Fenstermacher. Another committeeman will be named to represent the pharmaceutical profession of Mississippi.

Dr. Fenstermacher explained the formation of the committee followed a recommendation of Dr. Thomas Carlisle, past president of ACS, national, and chairman of the National Leukemia Committee.

"The National Leukemia Committee has called upon all 60 divisions to 'step-up' their programs to include special attention for patients with leukemia," Dr. Fenstermacher said.

"The conquest of leukemia alone would eliminate the tragic loss of life which kills over 2,300 children each year," the state president emphasized.

Statistics released by the State Board of Health have attributed over 134 leukemia deaths for Mississippi children last year. National statisticians estimate a total of 150 new leukemia patients in Mississippi this year. Research shows that leukemia accounts for almost 50 per cent of cancer deaths in children under 15.

The American Cancer Society is now spending more than $2 million in 37 research centers on leukemia related investigations, second only to the federal government's research program in the National Cancer Institute.

Louisiana Doctor Reports Theft of Mississippi License

Mississippi medical license No. 4118, issued June 25, 1958, to Dr. Loys William Willey, Jr., has been reported stolen, according to Dr. A. L. Gray, executive officer, Mississippi State Board of Health.

Dr. Willey's present office address is 6509 Asher, Metairie, La. A number of other documents were also involved in the theft.

State physicians are asked to be on the alert for persons illegally using this license. The theft has been reported to the Louisiana State Board of Medical Examiners, the Bureau of Narcotics in Washington, the Federal Bureau of Investigation in New Orleans, and the American Medical Association.

Drug Industry Passes $3 Billion Mark

The U. S. prescription drug industry passed the three billion mark in worldwide sales during 1962. Total drug industry sales rose more than 8 per cent to $3.2 billion in 1962. This included $756 million in foreign sales.

The information was obtained in a Pharmaceutical Manufacturers Association survey of its member companies which produce about 95 per cent of the nation's prescribed medicines.

Research and development expenditures by the prescription drug industry rose to a record $251 million. More than 90 per cent of the total was spent in the search for medicines for human use; the remainder was allocated for study of veterinary medicines. Foreign research conducted or sponsored by the industry accounted for $13 million.

Prescription drug industry research and development spending has increased an average of 15 per cent annually for the past 10 years. However, the increase in 1962 amounted to about 6 per cent, less than half that of the previous year and about half the increase anticipated a year ago when a similar survey was made of PMA member firms.

"Some curtailment of research activities and a more cautious attitude toward investment in new programs has developed in connection with passage of the 1962 Drug Amendments," said PMA President Austin Smith. "Drug firms' rate of spending in research is still more than double the average for all industry, however, and the industry leads all others in the ratio of scientists employed."

The number of scientists employed by the industry increased slightly in 1962, to more than 13,600.

The survey revealed that research conducted or sponsored by the drug industry is nearly all privately-financed. Government grants of $7.6 mil-

lion for industry research efforts amounted to less than 3 per cent of the total expenditures of $258.9 million. This contrasts with an all-industry average of 58 per cent government-financed research and development (National Science Foundation data).

Research activities in 1962 involved pharmacological testing of more than 168,000 chemicals and substances. Nearly 1,300 of these were tested in humans, the largest numbers of substances falling in these categories: hormones, antibiotics and anti-infectives, central nervous system agents and psychopharmacologic drugs, cardiovascular and hematological agents, analgesics and anesthetics.

The industry utilized nearly nine million animals in its testing programs, nearly 90 per cent of these being mice and rats. Other animals essential to drug development and testing include guinea pigs, hamsters, rabbits, chickens, turkeys, dogs, cats, and monkeys.

The 50 leading firms reported listing for sale an average of 150 products. These products include 58 distinct chemical entities and 92 compounded products, each available in some four dosage forms or units.

Taxes paid by the prescription drug industry reached a record $387 million in 1962, about 70 per cent of which was paid in U. S. federal income taxes. Reported net capital investment in research and development facilities and equipment rose to more than $156 million. Capital investment per U. S. production worker is approximately $43,000.

Southern Chest Physicians Set New Orleans Meet

The Southern Chapter of the American College of Chest Physicians will hold its 20th Annual Meeting on Nov. 17-18, 1963, in New Orleans, La., at the Monteleone Hotel.

The scientific program, covering the broad aspects of clinical and surgical treatment of cardiovascular and bronchopulmonary diseases, will begin at 1:00 p.m., Sunday, Nov. 17.

Fireside Conferences, co-sponsored by the Southern Medical Association and the Southern Chapter of the College, will be presented on Monday, Nov. 18, from 6:00 to 8:00 p.m. at the Monteleone Hotel. These informal discussions, led by well-known specialists, will include subjects of interest to general practitioners, surgeons, and clinicians. All practicing physicians, interns, and residents are invited to attend.

Mississippi Doctors Invited To Alabama Assembly

Mississippi physicians have a special invitation to attend the Sixth Annual Medical Progress Assembly Oct. 6-8 in Birmingham. The assembly will feature 30 distinguished lecturers and panelists.

Dr. John M. McMahon, general chairman, has announced a pre-assembly reunion of University of Mississippi medical alumni on Oct. 6, from 5 to 7 p.m. at the Tutwiler Hotel. Dr. W. E. Lotterhos of Jackson will be host.

Lecture subjects will include arthritis, cardiology, diabetes, endocrinology, gastroenterology, medicine, neurology, obstetrics-gynecology, pathology, pediatrics, radiology, and surgery. The assembly has been accepted for 15 hours of Category I credit by the American Academy of General Practice.

Special entertainment events have been planned for both physicians and their wives. The program will open with a reception and buffet at the Tutwiler Sunday evening. Other social activities will include a dinner and dance at Vestavia Country Club Monday evening and a luncheon and fashion show for the doctors' wives. Door prizes will be awarded and refreshments will be served during breaks for viewing the technical exhibits.

The Assembly is sponsored by the Birmingham Academy of Medicine, comprised of 160 younger specialists, with the cooperation of the Jefferson County Medical Society and the Alabama Academy of General Practice.

New features this year will be pre-assembly programs on arthritis and diabetes to which everyone is invited. Also there will be seminars on specialized subjects in addition to the assembly's general sessions.

Program speakers and their topics will include: Dr. Richard J. Bing, Detroit, professor of medicine, Wayne State University, "Coronary Reserve, What It Is and How to Measure It"; Dr. Isadore Snapper, New York, director of medicine and medical education, Beth-El Hospital, "What Is New in Hyperparathyroidism"; Dr. Edward T. Peter, department of surgery, Medical School, University of Minnesota, "The Use of Gastric Freezing in the Treatment of Duodenal Ulcer"; Dr. John A. Spittell, Jr., Mayo Foundation, "The

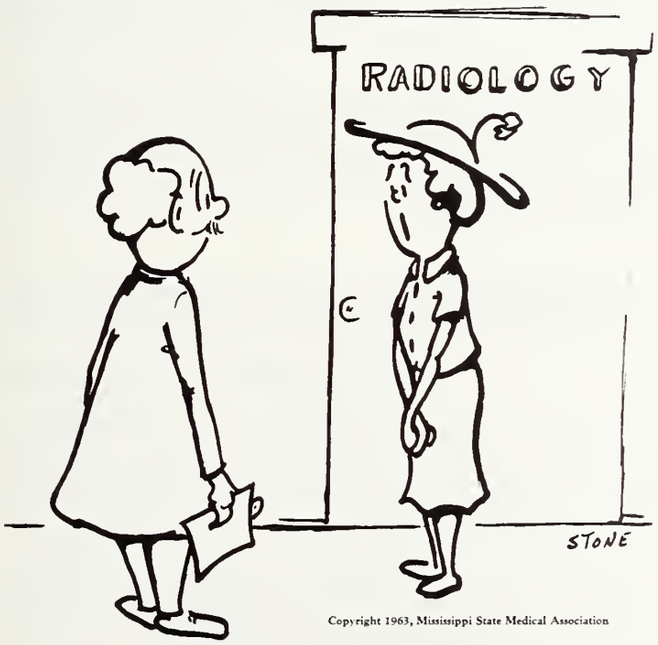
Use of Vascular Clues in Diagnoses"; Dr. Champ Lyons, Medical College of Alabama, and Dr. Frank Glenn, Cornell, "Infection as Related to Newer Antibiotics"; Dr. F. A. Simeone, Western Reserve University School of Medicine, "The Autonomic Nervous System"; Dr. Snapper—Clinical Pathological Conference; Dr. Judson Van Wyk, University of North Carolina School of Medicine, Dr. Robert F. Shaw, Massachusetts General Hospital, Dr. Harry C. Shirkey, The Children's Hospital, Birmingham, and Dr. James A. Pittman, University of Alabama Medical Center, "Thyroid Diseases in Children"; Dr. William Blakemore, chairman, department of surgery of the Graduate School of Medicine, University of Pennsylvania, "Surgical Treatment for Hypertension."

Ob-Gyn Board Schedules Part I Examinations

The American Board of Obstetrics and Gynecology has announced that the next scheduled Part I (written) examination will be held Dec. 13 at various examining centers in the United States, Canada, and military bases outside of the continental United States.

Candidates eligible to take this examination will be notified on or about Nov. 1, the board said.

Beginning in 1965, the Part I examination will be conducted in July at designated centers in the United States and Canada. Requirements, application procedure, and fees will be published in the 1964 bulletin of the board.



"I'm supposed to get 200 roentgens. How many watts is that?"

Candidates whose residency will be completed on or before June 30, 1965, will be eligible to make application to take the examination in July 1965.

The 1963 bulletin of the board is now available and may be obtained from Dr. Robert L. Faulkner, Executive Secretary and Treasurer, American Board of Obstetrics and Gynecology, 2105 Adelbert Road, Cleveland 6, Ohio.

PHS Announces Chemical Defense Course

A six-day training course in chemical and biological defense is currently being offered bimonthly at Fort McClellan, Ala., by the United States Public Health Service, Division of Health Mobilization.

The course which will be repeated through April 1964, is conducted in cooperation with the Army Chemical Corps School, Fort McClellan, and is designed to train public health and medical personnel in developing chemical and biological defense programs within states, counties, and principal municipalities.

The course includes detailed instruction in the following subject areas: public health aspects of chemical and biological warfare; detection, identification, and current capabilities of chemical and biological agents; survey and delineation of contaminated areas; decontamination materials and techniques; first aid and treatment for chemical and biological casualties; care and use of defensive equipment, and psychological aspects of chemical and biological weapons systems.

Directed at civilians, the classes will be of particular value to persons whose responsibilities require knowledge in the medical aspects of civil defense, such as state and local health department personnel, representatives of the Veterans Administration and Public Health Service, and faculty members of affiliated schools in the Medical Education for National Defense Program.

There is no tuition fee nor is security clearance required. Future courses are scheduled to begin Oct. 14 and Dec. 9, 1963, and Feb. 10 and April 6, 1964. One two-week class beginning June 8, 1964, has been scheduled for the presentation of the course, "Public Health and Medical CBR Defense." The second week of this course will be devoted to Radiological Defense.

Requests for enrollment forms and further information should be addressed to: Deputy Chief, Training Branch, Division of Health Mobilization, Public Health Service, Department of Health, Education, and Welfare, Washington 25, D. C.

Internists To Study Basic Mechanisms

The American College of Physicians has scheduled a postgraduate course on Basic Mechanisms in Internal Medicine for Sept. 9-13. The course will be held at the University of California Medical Center, San Francisco.

During the five-day meet, a selected group of topics in the field of internal medicine will be covered with particular emphasis on recent increases in the knowledge of basic mechanisms.

Further information may be secured from Edward C. Rosenow, Jr., M.D., Executive Director, American College of Physicians, 4200 Pine St., Philadelphia 4, Pa.

Mound Park Hospital Schedules Seminar

The Mound Park Hospital Foundation of St. Petersburg, Fla. has announced a Postgraduate Symposium in orthopedics, trauma, minor surgery, and office orthopedics to be held Oct. 17-19.



"Go check her temperature . . . and tell her this is a ten-minute thermometer."

Co-sponsors of the symposium will be the American Legion Hospital for Crippled Children, the Medical and Research Division of Bay Pines V.A. Center, and the American Academy of General Practice.

Limited to 35 physicians, the symposium will be acceptable for 18 credit hours, Category I AAGP. Fee for the three-day meet will be $40.

Further information may be secured from Orthopedics, Mound Park Hospital Foundation, Inc., St. Petersburg, Fla.

Interstate Offers 48th Program for GPs

The 48th annual Scientific Assembly of Interstate Postgraduate Medical Association will be held Oct. 21-24 at the Palmer House in Chicago. The assembly will offer 19¾ hours of varied teaching and AAGP Category II credit for a registration fee of $10.

The program is especially suited to the needs of generalists, as all lectures, panels, and clinics are closely related to medical problems familiar to the physician who does not devote his time to a single specialty. Panels on "Neck, Shoulder and Arm Pain," "Fractures and Dislocations in Children," and "The Pros and Cons in the Use of Anticoagulants" are important parts of the three and one-half day program.

Interstate is not a "membership organization," but offers an annual teaching program for practitioners interested in a varied review of new developments in the major branches of medicine. The 1963 assembly program offers educational exposure to more than 50 prominent medical educators, as teachers.

Those interested in full details of the program may write Dr. N. A. Hill, Secretary, Interstate Postgraduate Medical Association, Box 1109, Madison 1, Wis.

Occupational Health Congress Set for San Francisco

"America's Best Resource—the Healthy Worker," will be the theme of the 23rd National Congress on Occupational Health which meets Sept. 25-26 in San Francisco.

The two-day meeting at the Jack Tar Hotel is sponsored by the American Medical Association's Council on Occupational Health.

The conference theme will be developed by AMA president, Dr. Edward R. Annis, Miami, Fla., in opening session remarks. The theme will

be further expanded through four symposia. They are:

—Occupational health problems faced by the family physician.

—Educational resources for the practicing physician.

—Restoration to gainful employment.

—Relationship of personnel department to the medical department.

Other conference subjects include: Manipulation and Postural Balance in Low-Back Pain, Industrial Absence and the Personal Physician, Legal Responsibility of the Physician to the Nurse in Small Industry, Medical Programs for Small Plants, and Community Health Resources for Small Plant Programs.

The presentation of the Annual Physician's Award of the President's Committee on Employment of the Handicapped will be made during the Congress.

The AMA meeting will be immediately followed by the two-day Seventh Annual Western Industrial Health Conference.

For additional information write: Council on Occupational Health, American Medical Association, 535 North Dearborn, Chicago 10, Ill.

AMA Committee Discusses Role of Nurse

Writing in the July 13 issue of the *Journal of the American Medical Association* (Vol. 185, pp. 144-145), the AMA Committee on Nursing discusses the role of the nurse in modern medicine.

The committee observes that there are presently wide varieties of educational programs in nursing and that this diversity leads to misconceptions on the part of patients, physicians, and potential nursing students. The challenge for nurses, writes the committee, is to define the role of the professional nurse and the practical nurse and to examine these roles in the light of the modern scientific world.

Concluding its comments, the committee notes that the problem boils down to one pertinent question: What kind of care do patients need and who can most effectively provide that care? When the answer to this question has been agreed upon, writes the committee, it will be less difficult to predict the type of educational program essential to meet the needs of the nation's sick.

The paper, which is entitled "Educational Programs in Nursing and Related Career Opportunities," also contains a detailed chart of the various educational programs.

Further information on nursing careers and on accreditation of professional schools of nursing may be obtained from the Committee on Careers, National League for Nursing, 10 Columbus Circle, New York.



AUXILIARY

Six Auxiliary Members Named to Women's Cabinet

Six members of the Woman's Auxiliary to MSMA have been appointed to the Mississippi Women's Cabinet.

Appointees include Mrs. M. S. Riddell, Jr., Winona; Mrs. A. T. Tatum, Hattiesburg; Mrs. H. H. McClanahan, Jr., Columbus; Mrs. David B. Wilson, Jackson; Mrs. T. A. Baines, Jackson, and Mrs. Guy T. Vise, Meridian.

Auxiliary Confers Honorary Membership on Three

On the recommendation of the Gulfport Auxilary, the Executive Committee and the General Session of the Woman's Auxiliary to MSMA voted unanimously to extend honorary membership to three auxiliary leaders for their years of devoted service.

Those so honored were Mrs. Lucile B. McCall, Mrs. E. C. Parker, and Mrs. M. Murph Snelling, all of Gulfport.

The action was taken during the 40th Annual Session of the state auxiliary.

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Clinical Meeting, Dec. 1-4, 1963, Portland, Ore. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn, Chicago 10, Ill.

American College of Surgeons, Oct. 28-Nov. 1, 1963, San Francisco. Samuel P. Harbison, Secretary, 40 East Erie, Chicago 11, Ill.

American Academy of General Practice, April 11-16, 1964, Atlantic City, N. J. Mr. Mac F. Cahal, Volker Blvd. at Brookside, Kansas City 12, Mo.

Southern Medical Association, Nov. 18-21, 1963, New Orleans, La. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham 5, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 11-14, 1964, Jackson. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Mississippi Academy of General Practice, Sept. 25-26, 1963, Jackson. Miss Louise Lacey, Executive Secretary, P.O. Box 1435, Jackson, Miss.

Amite-Wilkinson Counties Medical Society, First Tuesday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday Monthly, 6:30 p.m., Robert E. Lee Hotel, Jackson. Jim G. Hendrick, 800 Carlisle St., Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday March and First Wednesday November, 2:00 p.m., Clarksdale. Whitman B. Johnson, Jr., 422 McWilliams Building, Clarksdale, Secretary.

Coast Counties Medical Society, Second Wednesday, January, First Wednesday, March, May, July, September, November. Charles N. Floyd, 1619-23rd Ave., Gulfport, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. Robert M. Graham, 612 Dixie Towers, Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March and September. Robert B. Townes, Jr., 1196 Mound St., Grenada, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. Thomas W. Wesson, 420 Magazine, Tupelo, Secretary.

North Mississippi Medical Society, First Thursday April and October, Oxford. Marcus E. Morrison, 512 Van Buren Ave., Oxford, Secretary.

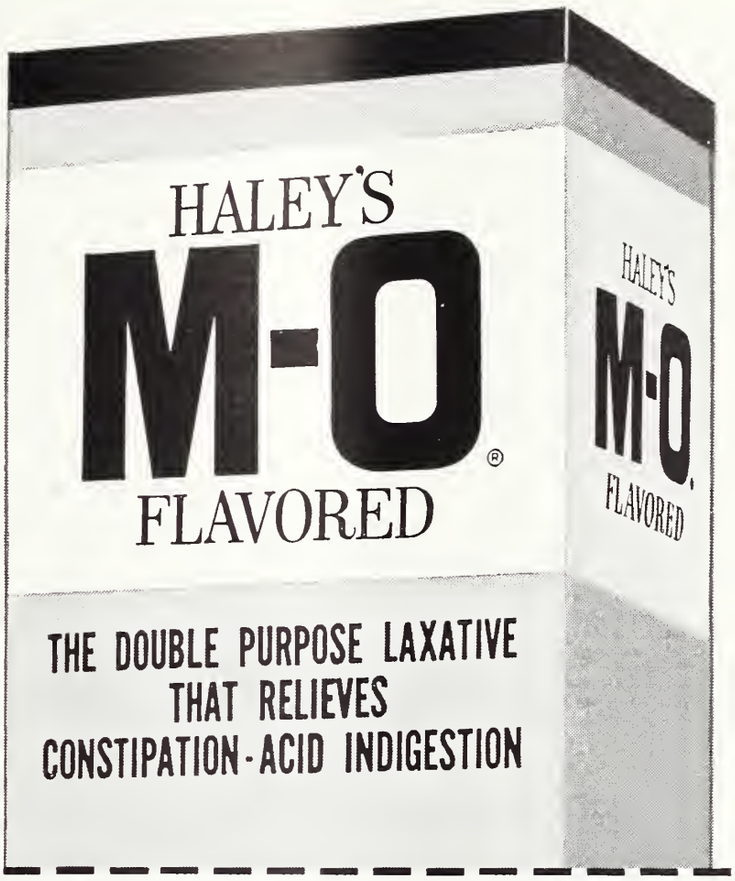
Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucien Olen Crosby Memorial Hospital, Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. James C. Bass, Jr., 424-13th Ave., Laurel, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Tom H. Mitchell, The Street Clinic, Vicksburg, Secretary.

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Chest Physicians Plan Congress in Mexico City

The Eighth International Congress on Diseases of the Chest, sponsored by the Council on International Affairs of the American College of Chest Physicians, will be held in Mexico City, Oct. 11-15, 1964.

The congress will be presented with the cooperation of the Mexican Chapter of the College and under the patronage of the Government of Mexico. It will be held in the Congress Building at the new Medical Center in Mexico City.

Dr. Donato G. Alarcon, regent of the College for Mexico, and dean of the Faculty of Medicine of the University of Mexico, will serve as president of the congress. Other officers of the congress are: Dr. Miguel Jimenez, secretary-general; Dr. Fernando Katz, treasurer; Dr. Fernando Quijano Pitman, secretary of scientific activities; Dr. Victor Manuel Betancourt, secretary of reception, and Dr. Jorge Espino-Vela, secretary of scientific assembly.

The congress will open on Sunday, Oct. 11, with registration, executive sessions, international committee meetings, and the Inaugural Ceremony in the evening.

The scientific program will begin on Monday, Oct. 12, and will include formal papers, panel discussions, motion pictures, and scientific and technical exhibits.

Fireside Conferences will be presented on Monday evening. The scientific program will continue to Thursday noon, Oct. 15. A banquet and dance will be held on Wednesday, Oct. 14.

Additional information may be obtained by writing Murray Kornfeld, Executive Director, American College of Chest Physicians, 112 East Chestnut St., Chicago 11, Ill.

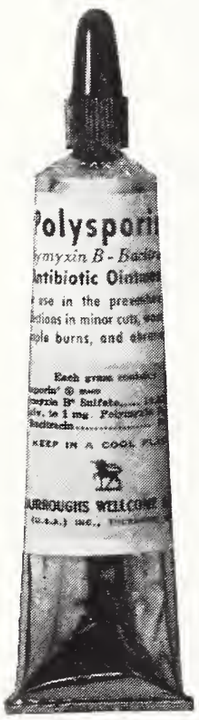
Baby Crop Reaches Peak In Summer

With the hot and humid summer months at hand, America's version of the population explosion is due to reach its peak, according to the Health Insurance Institute.

Obstetricians and maternity ward nurses can expect little rest in the days ahead because the months of July, August, and September traditionally are the time when more babies are born in the United States than during any like period.

Last year was no exception. July, August, and September were the top three months in births

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Anesthesiology Seminar Set For Miami Beach

The University of Miami and the University of Florida Schools of Medicine have announced the First Annual Postgraduate Seminar in Anesthesiology to be held in Miami Beach Jan. 5-8, 1964.

The theme for the seminar is "The Cardiovascular System" and although the problems of this system in relation to anesthesia will be stressed, the subjects presented will be of vital interest to all phases of medical practice.

The program will consist of five panel discussions including (1) physiological considerations in circulation, (2) recent advances in management of cardiac arrest, (3) pharmacological considerations related to circulation, (4) surgical and anesthetic management of the patient with heart disease, (5) symposium on hemorrhagic and septic shock.

Panel participants for the seminar will represent the medical specialties of internal medicine, surgery, pharmacology, and anesthesiology. Further information may be secured from Frank Moya, M.D., Professor and Chairman, Department of Anesthesiology, University of Miami School of Medicine, Miami 36, Fla.

Rural Health Meet Set for Hot Springs

The 16th National Rural Health Conference will be held Sept. 20-21 in Hot Springs, Ark.

Theme of the meeting, sponsored by the Council on Rural Health of the American Medical Association, is "Health Is a Bargain."

Topics to be discussed include the health care dollar, mental health, oral hygiene, what not to do before seeing a physician, immunization, animal diseases transmissible to man, and the Hattieville, Ark., rural community improvement project.

Among the participants will be Dr. Norman A. Welch, Boston, president-elect of the AMA; Dr. R. B. Robins, Camden, Ark., member of the AMA Board of Trustees; Dr. Robert Felix, director, National Institute of Mental Health, Bethesda, Md., and Dr. W. Wyan Washburn, Boiling Springs, N. C., chairman of the Council on Rural Health.

All sessions, including a banquet Friday evening, Sept. 20, will be held in the Arlington Hotel.



Maternal and Child Health Course Offered to Physicians

The University of California School of Public Health at Berkeley is offering a 9-12 months' full time education program to prepare specialists in maternal and child health.

Emphasis is placed upon preparing the students for administrative, consultative, or supervisory positions in federal, state, local, or international maternal and child health and crippled children's agencies. Opportunity is available for field studies in the state and local health services in California which are associated with the University of California School of Public Health.

Fellowships are available at the School of Public Health, provided by the U. S. Children's Bureau and the U. S. Public Health Service. The fellowships carry a $400 month stipend for the student plus $30 for each dependent in addition to tuition and incidental fees.

Inquiries for further information may be addressed to Dr. Helen M. Wallace, Professor of Maternal and Child Health, University of California School of Public Health, Earl Warren Hall, Berkeley 4, Calif.

Internists To Meet In New Orleans

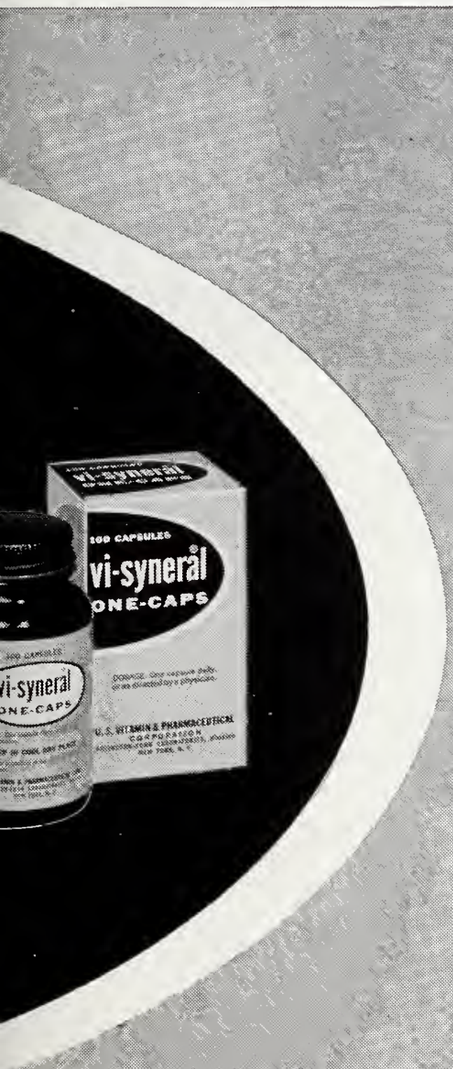
A regional meeting of specialists in internal medicine will be held Sept. 20-21, 1963, at the Royal Orleans Hotel, New Orleans, La.

The session is one of the postgraduate education activities of the American College of Physicians—an international medical organization which represents more than 11,600 specialists in internal medicine and related fields.

Aimed at providing practicing internists in the Louisiana area with current information on their specialty, the regional meeting will stress newer aspects in the treatment of diseases.

Special guests will include Dr. Wesley W. Spink, Minneapolis, Minn., president of the American College of Physicians, and Dr. Edward C. Rosenow, Jr., Philadelphia, Pa., executive director of the college. Dr. Spink, who is professor of medicine at the University of Minneapolis, will take part in the scientific program and speak at the banquet on Sept. 20.

On Friday afternoon, Sept. 20, the component societies of the American Society of Internal Medicine in the Southeastern Region will meet for luncheon.



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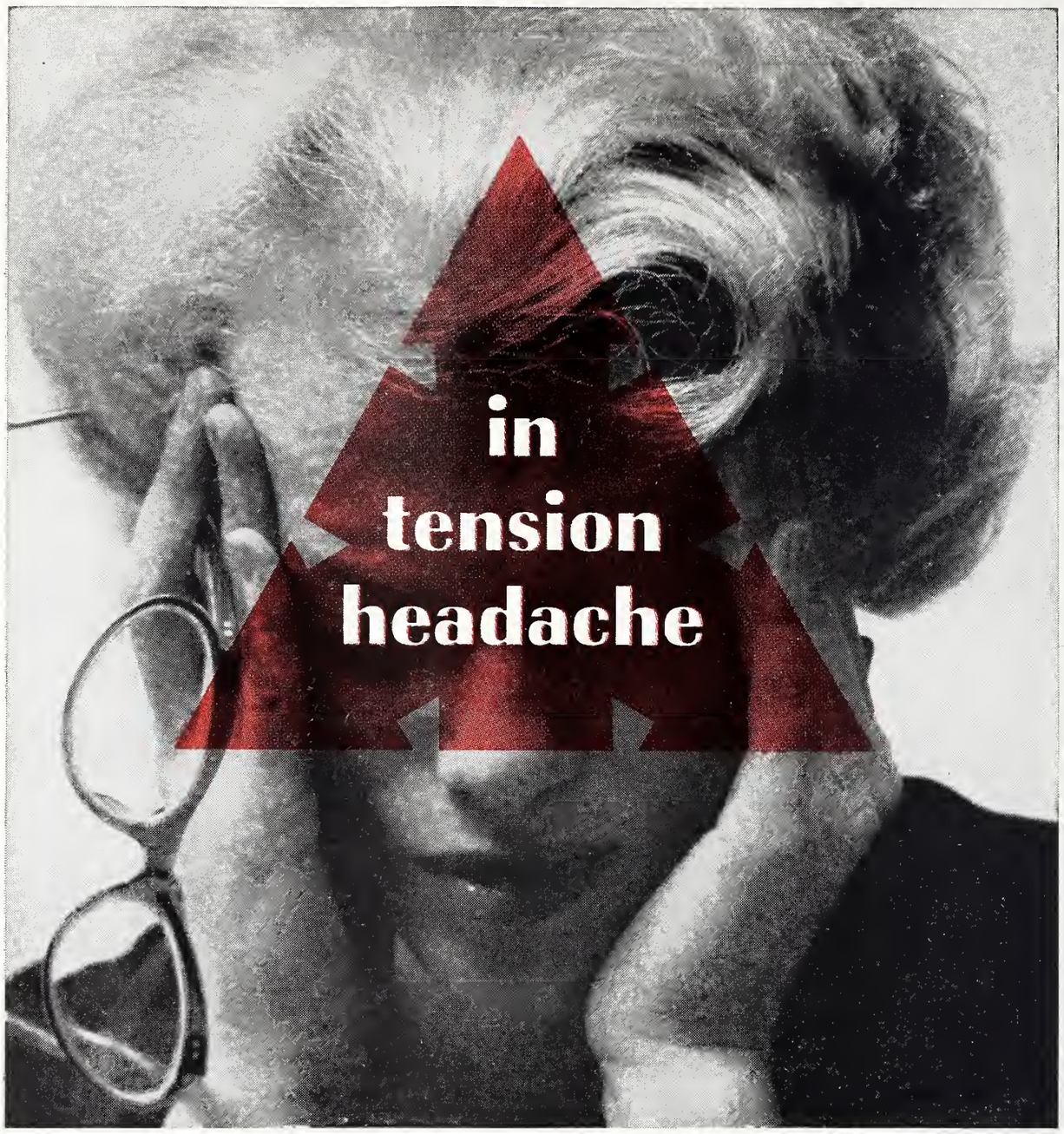
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ASCORBIC ACID (C)	75 mg.	(Phosphorus	39 mg.)
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RIBOFLAVIN (B_2)	3 mg.	(Iron	15 mg.)
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NIACINAMIDE	20 mg.	IODINE	0.1 mg.
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d, CALCIUM PANTOTHENATE	5 mg.	MAGNESIUM	1 mg.
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Articles for Publication

Manuscripts should be typewritten, double spaced on one side of the paper. Tables, charts, and tabulations should be submitted on separate sheets but their position in the text should be indicated. Authors are encouraged to limit bibliographies to 10 references, written in conformation to style utilized in scientific publications of the American Medical Association. Articles are accepted for publication on the condition that they have not been previously published and are contributed solely to this JOURNAL.

A thesis summary of 75 to 100 words must accompany each manuscript separately from the text. Figures and drawings are acceptable when prepared with black ink on white paper. Photographs for illustrations should be unmounted, untrimmed, glossy prints and all such material must be identified. No charges are made to authors for illustration engravings not exceeding four column inches per printed page.

Reprints may be obtained at cost from the association. The right is reserved to decline any manuscript for publication. Ordinarily, manuscripts submitted will be acknowledged whether published or not.

PROGRESS—BRITISH STYLE

Britain's newest experimental television program, "Shades of Darkness," is drawing some unbelieving stares. The first offering was poetry and commentary by C. Day Lewis and for at least 60 per cent of the show the screen was what the producers call "mid-grey" or blank. The purpose: to see "whether the viewer's imaginative faculties can be given more freedom and scope." In a later program called "Look, No People," the screen will also be blank most of the time in order to let the viewers "develop an impressionistic program without performers, letting their own free associations establish fresh and possibly startling combinations of vision and sounds." The viewers want to know how this improves on radio.

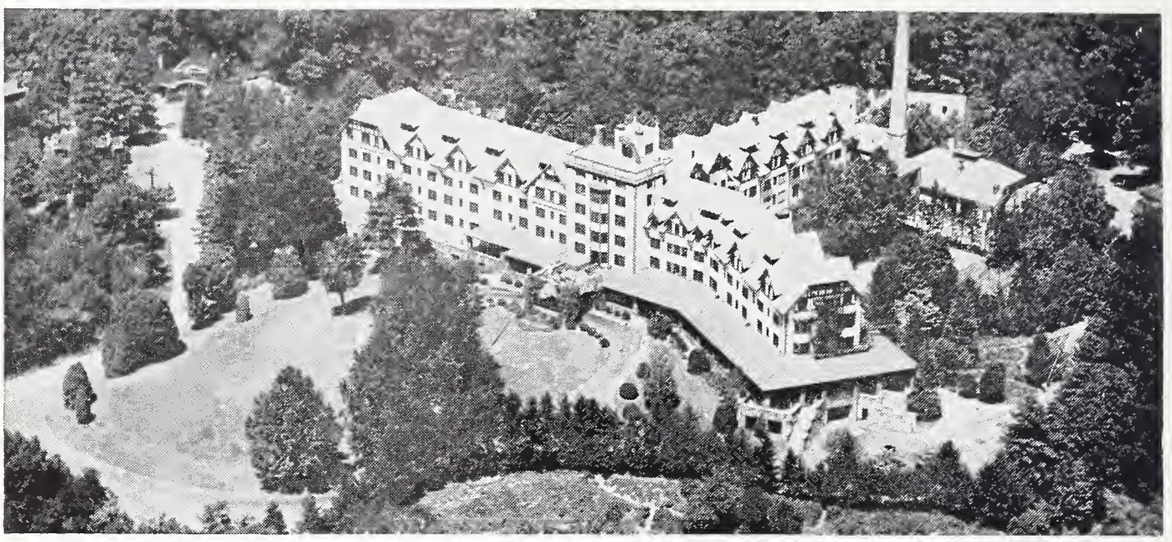
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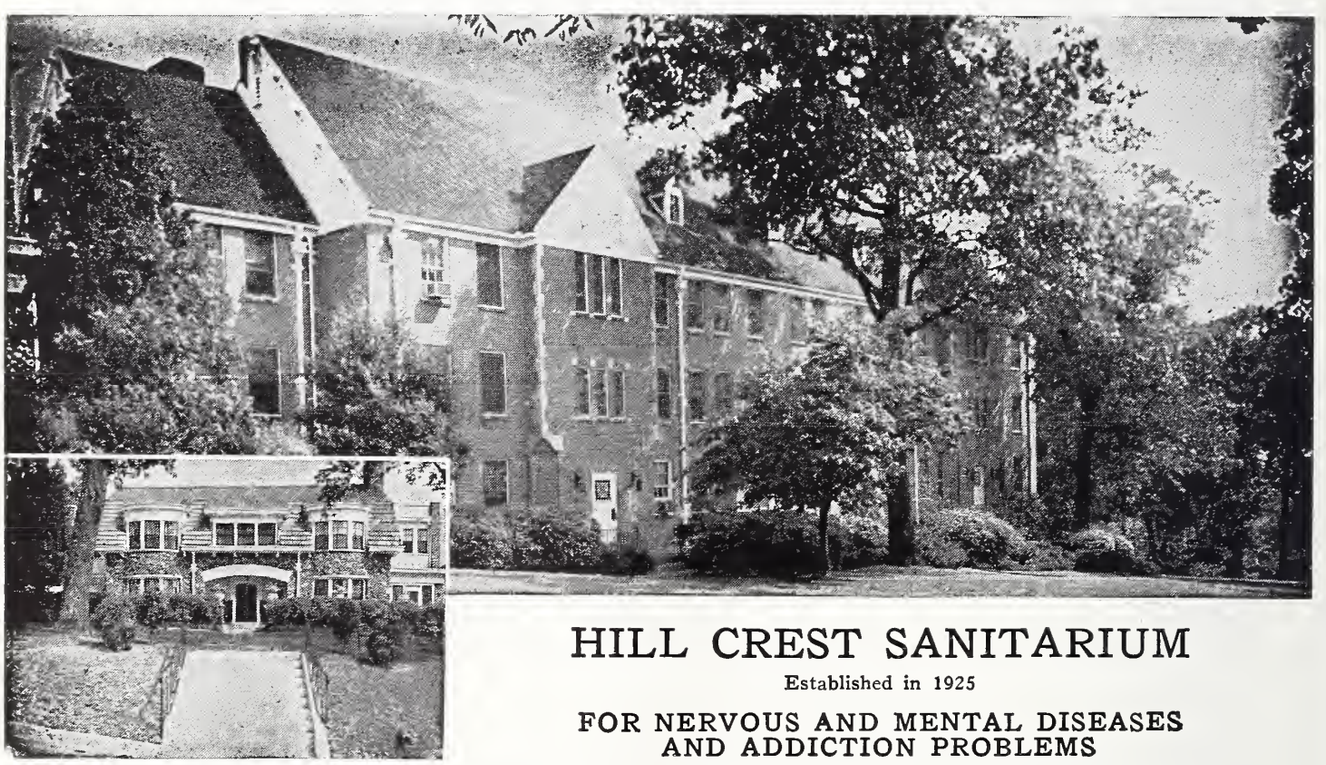
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Volume IV
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NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

October 1963

Dear Doctor:

Two pilot projects to treat narcotic addicts on an ambulatory, outpatient basis will be initiated by the National Association for the Prevention of Narcotic Addiction. The $1 million experiment will provide free drugs in decreasing amounts to carefully selected addicts who will simultaneously receive psychiatric care.

> MSMA has opposed so-called ambulatory clinic plan since 1959 when special studies on addiction were considered. The new NAPAN projects are based on liberal interpretation of AMA policy that experimental research is ethical.

Mississippi workmen's compensation insurance premiums are down 8.4 per cent over 1962, according to newly approved rates. Among work classifications listed in manual, the occupation of photo engraver is "safest" with costs of only $.24 premium per $100 of payroll. Highest hazard listed is chimney construction with $15.80 rate.

Wallet cards and jewelry-type devices bearing AMA's emergency medical identification symbol are becoming widely available. Sign of octagonal asterisk with vertical staff-and-serpent is universal warning that bearer has disease or impairment requiring special care in emergencies. Cards are $1 per 100 from AMA; jewelry devices are sold commercially.

An intensive statewide survey to determine immunization levels of Mississippians was launched by State Board of Health last week. Interview teams will work in all 82 counties with view toward discovering those needing polio, diphtheria, pertussis, tetanus, and typhoid protection. AMA is urging national effort on immunization and Congress passed bill to assist survey effort.

Final approval was voted by Senate on JFK's federal aid to medical education bill with 71-9 passage. Amendment by Senator Goldwater (R., Ariz.) to delete student loan provisions failed at last minute. Mississippi's John Stennis voted against entire measure; Senator Eastland was absent on official business. MSMA was only state medical association to testify in opposition to measure during hearings.

Sincerely,

Rowland B. Kennedy
Executive Secretary

DATELINE - MEDICAL AMERICA

NFL's Health Insurance Program Is Hailed Successful

New York - Pro football players, though rugged men, are subject to the same ills that afflict less muscular mortals and their health insurance experience proves it. The NFL sponsors a total health insurance program with life and retirement benefits for the 520 athletes on the 14 league teams. Experience in 1962 produced 280 claims, highest of which was for Bob Khayat's $8,000 series of stomach operations. Unique life feature permits retirement benefits up to $820 monthly at 65 years of age.

Physicians Recover On Indefinite 'Valuable Papers' Policy

Washington - Two physicians recovered over $29,000 for loss of 357 case histories which disappeared from their files, despite contention of their insurance carrier that the records were not identified in the application for the policy. The court held that sale of the insurance and subsequent renewal constitutes understanding of the carrier of the risks. Citation is Aetna Casualty and Surety Co. v. Casolaro, 314 F. 2d 279 (D.C., Jan. 31, 1963).

Life Expectancy Jumps Three Decades In Century

Chicago - Newest studies in life expectancy and longevity among Americans nails down facts in maze of hitherto confused statistics. Study is unique in using 1850 - instead of 1900 - as base year. White males born in 1850 could expect to die at age 40 and nonwhite males, at 32. Increase puts expectancy today near 70 for white males and all nonwhites but white females can look for 74 years of life.

Drug Research Is In Chaos, PMA President Says

Washington - Dr. Austin Smith, president of the Pharmaceutical Manufacturers Association, told the Federal Bar Association that the new drug laws and FDA regulations are damaging drug research. In 10 major companies, he said, 50 out of 67 research and development projects have been discontinued and two midwestern drug makers have closed their research departments. Difficulty is in complying with federal requirements on clinical trials.

Tax Court Allows Medical Deductions For Relative

Cleveland - Medical care deductions claimed by a nephew who assisted his dependent aunt were allowed by a tax court after being denied by Internal Revenue Service. Nephew contributed more than half of her support and $670 in medical care. Standard $600 exemption was denied but court upheld claim for care costs.

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
October, 1963, Vol. IV, No. 10

ORIGINAL PAPERS

The Use of Gastric Freezing For the Treatment of Peptic Ulcer Disease

CURTIS P. ARTZ, M.D.; JOHN MCFARLAND, M.B., Ch.B., and C. THOMAS FITTS, M.D.
Jackson, Mississippi

Studies on the use of gastric freezing in peptic ulcer disease were begun at the University of Mississippi Medical Center in October 1962. Of the patients in the initial study, seventy-four had duodenal ulcer, six stomal ulcer, and one hypertrophic gastritis. The authors discuss the selection of patients, the technique of freezing, and postfreeze care and present their results.

WANGENSTEEN AND HIS ASSOCIATES at the University of Minnesota, five years ago, pointed out the value of gastric hypothermia in the treatment of massive upper gastrointestinal hemorrhage. Two years later they reported very beneficial results in peptic ulcer disease by gastric freezing. Since both techniques utilize the same hypothermia machine, there has been some confusion that the treatment for massive hemorrhage and ulcer is the same. It must be made clear that upper gastrointestinal hemorrhage is managed by local gastric cooling for 18 to 48 hours at a temperature of 10 to 14° C., while ulcer disease is treated by actually freezing the stomach for one hour at –12 to –14° C.

Local gastric cooling appears to have its greatest effectiveness in bleeding from duodenal ulcer, gastric erosion, and esophageal varices. It is less beneficial in hemorrhage from gastric ulcer, steroid ulcer, and hypertrophic gastritis.[1, 2]

The first report on gastric freezing for the treatment of peptic ulcer disease by Wangensteen and co-workers appeared in May 1962. Experiences in the management of 24 patients with duodenal ulcer disease showed a high percentage of subjective relief of symptoms, disappearance of ulcer craters, and significant decreases in gastric secretory response.[3, 4]

Laboratory studies in dogs were initiated in the Department of Surgery at the University of Mississippi Medical Center in July 1962, utilizing the technique described by the Minnesota investigators. The initial studies were primarily directed toward determining the macroscopic and microscopic changes occurring in the gastric mucosa of the dog after freezing of the stomach for one hour with outflow temperature of –10 to –15° C. In 93 dogs, gastrostomy after freezing showed that 15 per cent had rather severe mucosal damage, 54 per cent marked damage, 21 per cent minimal damage, and 10 per cent no damage. The animals ate well, however, and three to five days later,

From the Department of Surgery, University of Mississippi School of Medicine.
Read before the Section on Surgery, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 13-16, 1963.

when gastrostomies were performed, little or no damage of the mucosa was evident. Parallel studies in 33 dogs suggested that gastrectomy could be performed 24 hours after the gastric freeze without any fear of wound breakdown in all the animals except those with very severe mucosal damage.

The abundant amount of experimental work of Wangensteen and his co-workers suggested that a beneficial effect could be achieved in peptic ulcer disease by freezing the stomach. Stimulated by their gratifying experience of symptomatic relief of duodenal ulcer pain in their initial group of patients, a cooperative but independent study was initiated at the University of Mississippi in October 1962. Patients were carefully selected and studied prefreeze and postfreeze in detail.

This report concerns experiences with 81 patients treated by gastric freezing.

CLINICAL MATERIAL

Most of the patients treated were private cases referred from various areas in the Southeastern part of the United States. Seventy-four patients had duodenal ulcer, six stomal ulcer, and one hypertrophic gastritis.

In general, the indications for treatment by freezing were as follows:

1. Duodenal ulcer disease as evidenced by radiographic findings and history of not responding to medical therapy. Some patients had failed to be relieved of pain in spite of a very rigorous medical regimen. Other patients could be relieved by carefully following the prescribed medical therapy but their socioeconomic status was such that it was impossible to follow the regimen.
2. Duodenal ulcer with history of a severe hemorrhage. In all instances, treatment by freezing was not attempted until at least seven days after cessation of bleeding. It is generally believed that the hyperemia immediately following gastric freezing might lead to recurrence of hemorrhage if performed early after the active bleeding has stopped.
3. Duodenal ulcer with previous perforation and continued high acidity. Freezing was always delayed for a period of 14 days after the perforation.
4. Stomal or marginal ulcer. The best results after freezing have been reported in this group of patients. It is believed that the small remnant of stomach after gastric resection permits a better and more complete freeze.

The presence of a gastric ulcer or a duodenal ulcer with radiographic evidence of obstruction was an absolute contraindication to treatment by gastric freezing.

EVALUATION OF THE PATIENT

In addition to radiographic studies, three acid secretory tests were performed prior to freezing. The first was a basal, overnight, eight-hour secretion. This was performed by collecting the gastric secretion by means of a nasogastric tube for eight hours during the night. The normal amount of free hydrochloric acid produced during this period is about 15 mEq. Patients with doudenal ulcer usually secrete more and a few as much as 90 or 100 mEq. (Total milliequivalents of free hydrochloric acid is computed by multiplying the degrees of free acid by the total volume of the secretion in milliliters and dividing the product by 1,000.)

The second test was a peptone stimulation test in an attempt to determine changes in the antral phase of gastric secretion and the third a Hollander test to determine any changes in the cephalic phase of gastric secretion. These same secretory tests were again performed 24 hours after the freeze and at follow-up examinations three and six months postfreeze.

TECHNIQUE OF FREEZING

All patients in this series were treated with the use of a Swenko gastric hypothermia machine. The technique of freezing utilized in the initial part of this series was identical with that described by the Minnesota investigators. As experience was gained, certain beneficial modifications were made, and the current technique for gastric freezing is described in detail in the paragraphs that follow.

To assure an entirely empty stomach, the patient is kept fasting for several hours before the freezing procedure. Preoperative medication consisting of meperidine hydrochloride, 50 mg., chlorpromazine hydrochloride, 25 mg., and atropine, 0.6 mg., is given about one hour prior to freezing.

The gastric hypothermia machine is turned on about 30 minutes before the anticipated time of the procedure so that the fluid in the reservoir will be cooled to a temperature of at least –20° C. The patient is taken to the operating room in his bed. Commercially available electric blankets are placed beneath and above him.

Dyclonine is used for local anesthesia. With the patient in a semisitting position, 2 ml. of this solution in a 5 ml. syringe with a 20 gauge needle are squirted into the pharynx and the patient is instructed to gargle one minute before swallowing. Five minutes later, a nasogastric tube is inserted to aspirate all air and gastric juice. It is believed that air or fluid within the stomach will prevent a good freeze. Air in the stomach may give a sen-

sation of fullness and prevent an adequate amount of coolant being placed in the gastric balloon. After the nasogastric tube is removed, the patient again gargles with 2 ml. of the local anesthetic. Ideal anesthesia is usually achieved in about 20 minutes after the first gargle. Before passing the freezing tube, the back of the tongue and pharynx are tested by the operator's finger to make sure that the gag reflex has disappeared.

While waiting for the complete effect of the local anesthetic agent, the balloon is prepared and tested. The standard stomach-shaped latex balloon is used for a duodenal ulcer, a small round balloon for a stomal ulcer.

The balloon is cut off so that there is not a long esophageal component, and it is secured to the end of the freezing tube by two multiple wound ligatures of 0 silk. The knots of the silk ligatures are cut short and covered by a sleeve of rubber to eliminate any rough irregular surfaces that might irritate the esophageal mucosa. The folding of the balloon requires special care so that it will open in the stomach without twisting. A proven technique for folding is shown in detail in Figure 1. The balloon is then filled with about 1 liter of coolant and observed for any evidence of leakage. After it is emptied, the excess air is evacuated from the system, and the balloon is folded around the end of the tube in preparation for insertion.

The folded balloon is inserted by holding the tubing in the right hand and by placing the first two fingers of the left hand in the posterior pharynx. The left hand guides the tubing as it is pushed down the pharynx and pressure to move the balloon down is provided by the right hand. The balloon meets a slight obstruction in the region of the upper pharyngeal muscle. It is manually pushed through this area, and then the patient is asked to swallow. As the balloon reaches the cardia, it may be necessary to manually push the tip through the cardia into the stomach. Very little gagging occurs in a well-prepared and well-anesthetized patient. Should the patient gag and become excited during the passage of the tube, it should be removed and reinsertion attempted a few minutes later after better anesthesia is obtained. Occasionally, an excited patient with poor anesthesia will have a spasm of the pharyngeal

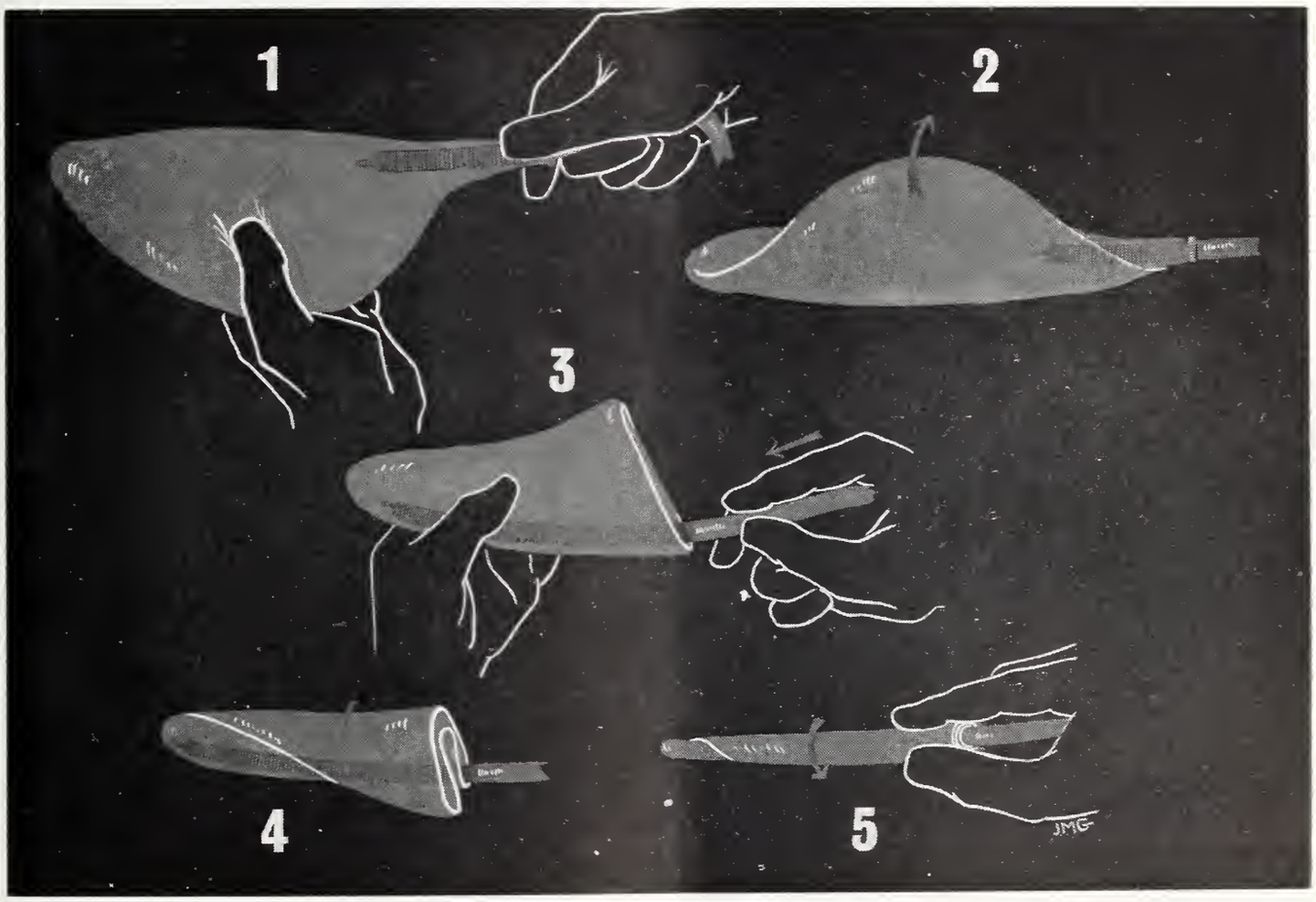


Figure 1. Steps in folding the balloon. (1) The balloon is filled with 100 ml. of coolant. (2) It is twisted on the tube 180° counter-clockwise. (3) The tube is telescoped into the balloon until the tip of the inflow tube reaches the tip of the balloon; then all fluid is evacuated. (4) The balloon is folded in a clockwise fashion around the tube. (5) It is ready for lubrication and insertion. This technique permits unfolding in the stomach without twisting.

muscle. One should not force the balloon through this constricted area or perforation might occur.

As soon as the balloon is in the stomach, 300 ml. of fluid should be instilled. One can usually tell by the rapidity and smoothness with which the balloon fills whether or not it is in the proper position. If it does not fill smoothly, the fluid should be removed and the tube withdrawn. After the balloon is checked and refolded, it is again inserted. After filling with the initial 300 ml. of fluid, the patient is asked to open his mouth and gentle pressure is used to pull the balloon into the upper part of the stomach. It should not be set too tightly against the cardia or it will push against the diaphragm. Freezing of the diaphragm may cause a potential complication of diaphragmatic irritation and fluid collection in the left chest. Usually, it is wise to pull the balloon up until mild resistance can be felt. Then the patient is asked to swallow once to move the balloon slightly away from the cardia. The proper position is achieved when the tube in the open mouth moves in and out as the patient breathes deeply. The head of the bed is lowered and the patient in the horizontal position is turned on his right side.

The balloon is then slowly filled to about 800 ml. with 100 ml. increments. From time to time during the filling, the fluid is allowed to circulate in the balloon to remove any wrinkles and set the balloon to the shape of the stomach. Circulation in the balloon at this stage should not last more than a few seconds or the cold liquid will cause gastric spasms making it difficult to properly position the balloon. The patient is then returned to his original semisitting position. Additional coolant at 100 ml. increments is added to the balloon until the patient has a very full sensation in his stomach. If he states that his stomach hurts then there is probably too much fluid in the balloon. The balloon should be filled until it has the greatest amount that will not cause pain. In the average adult male this is about 1,000 ml., in females slightly less. As soon as the balloon is well filled and positioned, circulation of the coolant is started. This is continued for one hour. As the stomach begins to freeze, the patient may have mild or rather severe cramps lasting for not more than three minutes. Discomfort seems to be greater when the freezing is rapid. The patient may become very apprehensive as the cramps start unless he is forewarned.

During the freezing, the dials of the machine should be carefully monitored at five-minute intervals and a record maintained of the temperatures during the freezing. This record of the details of the procedure serves as a note similar to an operative note. The outflow temperature should be kept between −12 and −14° C. This can be achieved by maintaining the inflow temperature at about −17 to −20° C. From time to time, air will collect in the system and must be evacuated. This procedure, unless carefully executed, may cause the inflow of additional fluid and overdistention of the balloon.

The patient may get very cold and require additional blankets after about one-half hour of freezing. Patients with an appreciable amount of adipose tissue rarely complain of being cold but thin patients usually experience some shivering during the last 15 minutes of the procedure. Usually, the body temperature drifts downward from about 99 to about 96° F. After the initial period of cramps, the patient experiences no further discomfort in the stomach. He usually relaxes and may even fall asleep for most of the freezing.

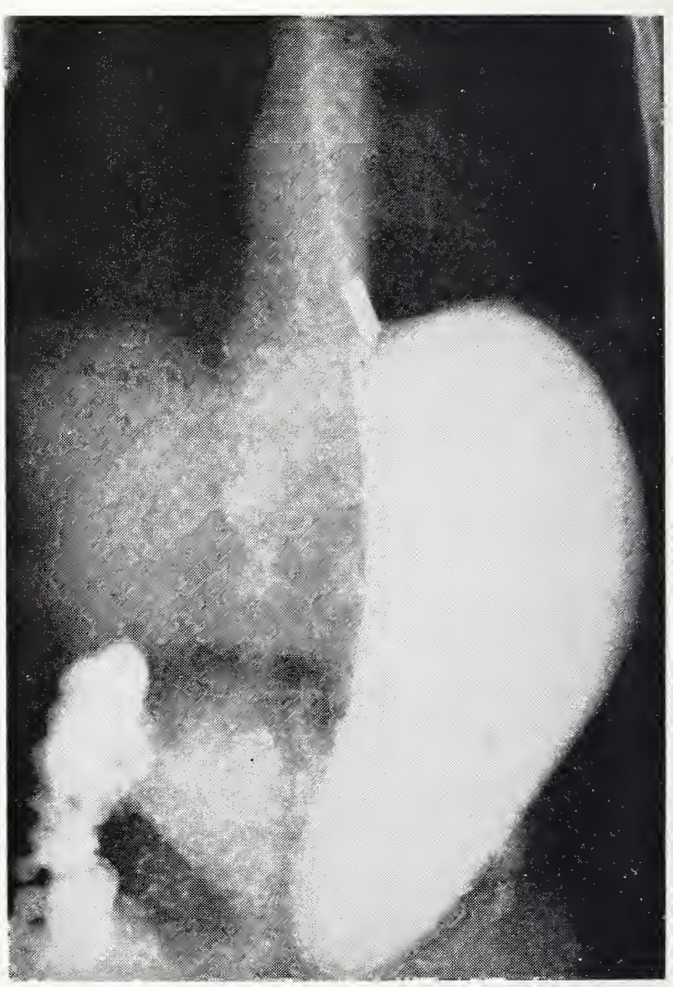


Figure 2. Roentgenogram of inflated gastric balloon in stomach. In this patient the balloon was inserted and 1000 ml. of radio-opaque material put into the balloon. This is the size of the balloon for the usual freeze.

Even though the tubing going through the mouth is quite cold, it is not uncomfortable and there has never been freezing of the tongue or lips.

At the end of one hour, the machine is turned off, and the stomach is allowed to thaw for at least five minutes. The balloon is then deflated slowly over a period of five to ten minutes. The aim is to permit the stomach to thaw and to deflate the balloon in such a way that it will not pull any of the mucosa away from the stomach wall. The tube is removed, and the balloon is inspected. Occasionally, a little fresh blood is seen on the balloon. This is probably the result of irritation of the pharynx.

POSTFREEZE CARE

After the freeze the patient is returned to his room with the electric blankets in place. He will usually sleep for one or two hours and by then his body temperature has returned to normal. Within two hours after the freezing, he may have water or milk and shortly thereafter, a full liquid diet. On the following day a bland diet is given. Some patients have a loss of appetite for one or two days; other patients experience an increased appetite immediately after the freezing procedure.

An occasional patient will experience nausea and vomiting a few hours after the freeze, but this is extremely rare. Two patients vomited 100 to 200 ml. of bright red blood within a few hours after the freezing but had no further difficulty. Ulcer-type pain completely disappears. Some may have a soreness and a sensation of fullness in the epigastrium for two days. It is thought that this is due to the edema that develops in the gastric mucosa after freezing. Postfreeze tests are done and stools are checked for evidence of melena. He is discharged on the third postfreeze day.

The freezing technique causes a moderate amount of inflammatory change within the wall of the stomach. The edema and inflammation usually disappear in 72 hours. Because of these changes which occur in the gastric mucosa, the patient should not return to work or attempt vigorous exercise for four days after the freeze. When he is discharged from the hospital, he should be instructed to stay on a bland diet for two weeks, eliminating coffee. After two weeks, he may go to a regular diet, take small amounts of alcohol occasionally, and drink decaffeinated coffee.

RESULTS

Eighty-one patients were treated by gastric freezing; 74 had duodenal ulcer, six stomal or marginal ulcer, and one hypertrophic gastritis. Of the 74 patients with duodenal ulcers, seven were refrozen four weeks to four months after their initial freeze. Seventy of these patients have had continuing relief of symptoms. It must be pointed out that some of the patients have been followed as long as seven months, but many of them for only a matter of a few weeks.

There have been four failures in the duodenal ulcer series. One patient had complete relief of symptoms for a period of two months. Then he experienced acute abdominal pain and underwent an exploratory laparotomy in another hospital where a large duodenal ulcer was found, and a partial gastrectomy was performed. Another patient, with radiographic evidence of duodenal ulcer disease, experienced burning pain and vomiting beginning two weeks after the freeze. Additional roentgenograms showed no unusual abnormalities. Three months later, as symptoms progressed, gastroduodenal roentgenograms showed a gastric ulcer on the lesser curvature. On reviewing the films, this ulcer was present initially. A partial gastrectomy was performed and the patient had an uneventful recovery. One patient that experienced three massive bouts of hematemesis, was treated by gastric freezing and one month later had another gastric hemorrhage requiring emergency gastrectomy. The fourth patient had severe atypical duodenal ulcer symptoms for two years after a pyloroplasty. Freezing of the stomach on two occasions, six weeks apart, failed to relieve him of his symptoms.

Gastric freezing, with about 500 ml. of coolant in the balloon, was used in six patients who had extremely troublesome stomal ulcers. Five patients were completely relieved of symptoms; the other patient had recurrence of symptoms after ten days and was refrozen. His ultimate result cannot be determined at this time. The one patient with hypertrophic gastritis seemed to receive a very beneficial effect from the freezing.

In this series, the aftereffects of freezing were minimal. About 15 per cent of the patients experienced troublesome gas. In two patients this persisted for several weeks; in most patients, it was a problem for only two to five weeks. In 7 per cent of the patients, benign melena was reported. This lasted only a few days and caused the patients no particular difficulty. In three patients melena persisted, resulting in a diminution of blood volume requiring one to three transfusions. After a few days in the hospital and repletion of blood volume, the patients experienced no further difficulty and are continuing free from gastric symptoms. There have been no patients who developed gastric ulcers as a result of freezing and

no patients with fluid in the thoracic cavity following irritation of the diaphragm.

FIBERSCOPIC STUDIES

In more than 20 patients observations have been made of the gastric mucosa by the use of the Hirschowitz Fiberscope. In the first 24 to 48 hours postfreeze there is some redness and edema present. Most patients show small punctate hemorrhages. Some patients have been noted to have small areas of hemorrhagic engorgement of the mucosa and one of these subsequently had a hemorrhage which required transfusion.

ACID SECRETORY STUDIES

Basal secretion studies (eight-hour overnight secretion) were performed prefreeze and postfreeze in 66 patients. In 28 patients there was a 70 to 100 per cent reduction in acid secretion, and 14 of these were completely achlorhydric after freezing. A 30 to 70 per cent reduction in acid was noted in 12 patients and there was no reduction in acid in 26; a few patients had an increase in acid secretion after the freezing.

The changes in the peptone and Hollander tests paralleled the changes in the eight-hour secretion studies. There did not seem to be any specific diminution in the response to insulin or to peptone. From these tests, there was no evidence that any special effect or change in the cephalic or antral phases of gastric secretion occurred after freezing.

These results are very preliminary in nature. Certainly, before any definite conclusions can be drawn concerning the ultimate value of the procedure, a follow-up period of at least one year will be necessary.

SUMMARY

Experiences over a seven-month period in the treatment of 81 patients with peptic ulcer disease by freezing of the stomach for one hour permits the following conclusions:

1. A high percentage of the patients received symptomatic relief. This is very dramatic, but it must be remembered that this is a subjective observation.
2. When properly performed in carefully selected cases, the technique is not uncomfortable for the patient and is followed by a very minimal number of troublesome after-effects.
3. Secretory studies show a diminution in acid output in 70 per cent of the patients. There is, however, no clear correlation between reduced acid secretions and persisting relief of symptoms.
4. It has not been possible to discover, in investigations thus far, why freezing gives such remarkable relief of duodenal ulcer symptoms.
5. A prolonged period of follow-up with thorough studies in a large number of cooperative patients will be required before definite conclusions can be drawn concerning the true value of gastric freezing. The method warrants further clinical evaluation, but should not be considered standard treatment for peptic ulcer disease. ★★★

2500 North State St.

This work was supported in part by grant A-5122(C1) from the United States Public Health Service.

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ON SECOND THOUGHT . . .

Boccaccio's *Decameron,* first published in Italy in 1353 and sold freely since, was impounded recently by Sardinian customs officers as pornographic literature.

—*Insider's Newsletter*

Diagnosis and Management of Uveitis

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Current studies suggest that a specific etiology can be established in less than 50 per cent of uveitis cases. However, there has been an overall improvement in the treatment of this disorder in recent years due to the establishment of uveitis clinics and the proper use of specific and nonspecific drugs. The author discusses the classification and etiology of uveitis and concludes with a consideration of treatment.

THERE HAS BEEN A PAUSE in the recognition of additional causes for both anterior and posterior uveitis during the past few years, and yet studies suggest that a specific etiology can be established in less than 50 per cent of all cases. The answer, of course, is that the most satisfying criterion of diagnosis still remains the finding of the organism, parasite, protozoan, or fungus within the uvea or retina. In spite, for instance, of a good presumptive diagnosis that the *Histoplasma capsulata* does invade the posterior uvea of the human eye, the fungus has never been found in a clinical case. The undisputed confirmation of this type of etiological agent therefore remains in doubt. The possibility that this fungus is the cause of posterior uveitis is the most recent contribution from etiological studies.

Even though there is a lack of firmness in the etiology, there has been an improvement in the over-all results in uveitis care due to the establishment of uveitis clinics and the proper employment of available specific and nonspecific drugs. These clinics are organized to employ all the procedures that will lead to a most likely classification and the most probable etiological diagnosis of the uveitis. No other ocular disease requires a more orderly survey and a more thorough study of the accumulated data than does uveitis. A lot can be learned from the examination of both eyes, but to neglect the history, physical examination, and laboratory tests before treatment is undertaken is to give up any idea of establishing an etiological diagnosis, upon which specific therapy must be based.

CLASSIFICATION

A careful examination of both eyes at the initial visit should lead to some sort of a classification of the uveitis. This is the point from which all necessary studies must begin, leaving out investigations that are unlikely to add anything to an understanding of the problem. There will be difficulty in initially classifying some cases and the classification into which other cases seem at the moment to fall will be changed as the disease within the eye develops. However, even a tentative classification should be made which will serve to relate the uveitis to the most likely etiology and likewise provide a basis for changes that may develop before treatment is effective. The initial examination must include a thorough search of the fundus of each eye. The examination of the posterior eye may easily be made at this time and reveal perfectly normal fundi or perhaps chorioretinal scars as well as the responsible lesion for the present attack. A few days later the fundus may be entirely obscured by heavy vitreous opacities. The results of the initial examination should be carefully recorded with drawings of the chorioretinal scars and active lesions.

All that is necessary at the initial examination of an early case or a recurrence of a previous attack is to decide whether the uveitis is anterior, posterior, or diffuse. What is important for the moment is not whether the attack is nongranulomatous or granulomatous. If, in the early stages of the dis-

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ease, the maximum reaction is in the anterior chamber, then it may be considered as an iridocyclitis or anterior nongranulomatous uveitis. If, however, the maximum reaction is in the posterior vitreous and further, if old chorioretinal scars along with a suspicious or readily apparent active chorioretinitis are seen, then the case should be considered as a chorioretinitis or granulomatous posterior uveitis. There are exceptions to this rule. For instance, the maximum reaction of sarcoid uveitis is in the anterior eye, but the disease is classified as granulomatous. Occasionally, a diagnosis of peripheral chorioretinitis or cyclitis also will be made. These situations are rare, and the diagnosis will only be made as the disease develops. It serves to further confuse a rather troublesome situation if the initial classifying of uveitis is made to appear beyond the scope of everyday examination and interpretation.

Many classifications of uveitis have been proposed and each one has some value. It is not suggested that the following classification is new, but it divides uveitis into a sufficient number of categories that the clinical types seen can be systematically arranged.

CLASSIFICATION

Anterior
- A. Nongranulomatous
 e.g. allergic iritis or iridocyclitis
- B. Granulomatous
 e.g. sarcoid

Posterior
- A. Granulomatous chorioretinitis
 e.g. toxoplasmosis

Combined Anterior-Posterior
 e.g. tuberculosis and sympathetic ophthalmia

Diffuse and Chronic
- A. Cyclitis
- B. Peripheral chorioretinitis
- C. Heterochromic cyclitis
- D. Pars planitis

ANTERIOR UVEITIS

Nongranulomatous or Iridocyclitis. Inflammation of the iris and ciliary body without involvement of the choroid is the commonest form of uveal inflammation. In an analysis of 474 cases seen in the Uveitis Clinic of the Washington Hospital Center, 328 could be considered anterior nongranulomatous uveitis. This means that inflammation of the anterior uvea is almost two and a half times more common than posterior uveitis.

A typical attack of iridocyclitis is usually unilateral and is ushered in with considerable pain in the eye aggravated by exposure to light. There is a variable amount of ciliary congestion and visual impairment. Slit lamp examination reveals white precipitates of varying size on the posterior surface of the cornea, with cells, increased protein, and possibly fibrin in the anterior chamber, and occasionally quite severe edema of the cornea with or without elevated intraocular tension. Edema with visible blood vessels on the iris will be seen along with miosis and probably posterior synechia formation. If pain and ciliary congestion are present and the signs in the anterior eye fairly severe, iridocyclitis is safely diagnosed. The pupil, however, must be dilated by drops, packs, or subconjunctival injections to complete the examination.

After dilation of the pupil, pieces of pigment may be seen on the anterior capsule; otherwise, the lens is clear. A mild to moderate number of cells will be found in the anterior vitreous along with some increase in protein. Frequently, however, the reaction in the anterior eye makes it impossible to see the anterior vitreous with either slit lamp or ophthalmoscope. If the fundus can be seen, it should be carefully and rapidly checked for healed or active areas of chorioretinitis. It is not usually desirable in a painful eye to use the indirect ophthalmoscope or the contact lens and slit lamp. Furthermore, the response of uncomplicated iridocyclitis to available treatment is so satisfactory that these instruments may be quite comfortably used in a few days. The fundus examination of each eye including the periphery of the retina, nerve, and macula should be entirely negative to maintain a diagnosis of iridocyclitis.

Having then diagnosed an acute iridocyclitis, recurrent or otherwise, is any survey justified? At the Washington Hospital Center practically all of the new uveitis cases and many of the recurrent attacks are seen in the general eye clinic or as emergency cases first and then referred to the uveitis clinic. Three days may elapse, therefore, before the patient is seen in the special clinic.

Since it is not known for sure how effective the preliminary treatment will be, the patient is ordered to have what is called the Minimum Initial Survey. The results of this investigation will be available when the patient is first seen in the special clinic.

Minimum Initial Survey

1. Complete blood count
2. Sedimentation rate
3. Urinalysis
4. Chest x-ray
5. Serology for syphilis
6. Fasting blood sugar

In many instances when the patient is seen in the special clinic, the attack seems definitely under control. However, at that time a medical history relevant to uveitis is taken and all the data transferred to the records used in the special clinic. Pertinent findings from the survey are given attention, and treatment is continued.

The diagnosis of iridocyclitis may be retained even though no improvement has occurred, yet the attack is still unilateral, with no significant posterior disease and no unmistakable granulomatous signs in the anterior eye. No further survey is ordered, but the oral administration of steroids is considered. The value of the initial survey is now apparent. The serious contraindications to the oral use of steroids can be ruled out by the survey, and further delay in the use of this valuable medication has been avoided.

If the improvement continues under this management, no further effort is made to determine the cause. If, however, the improvement slows up, the survey is extended to a dental examination with removal of infected areas, ear, nose and throat examination with appropriate treatment, and in men an investigation of the prostate.[3]

Fortunately, most attacks of acute anterior uveitis can be terminated by nonspecific management without digging any deeper into the basic cause than has been outlined. Exceptions, however, are recurrent attacks of iridocyclitis or the occasional case of persistent low grade iridocyclitis, which does not quite meet the criteria of anterior granulomatous uveitis. Each of these exceptions requires a physical examination and complete survey in an effort to determine a specific etiology. (See details under Etiology and Method of Treatment.)

Granulomatous. If the character of the eye reaction changes or if a granulomatous anterior uveitis is suspected from the beginning, the investigation must become more extensive. The separation of anterior uveitis into nongranulomatous and granulomatous is never easy on the basis of slit lamp examination, but the following criteria should be observed:

1. If ciliary congestion and pain disappear or were never too severe, yet the signs of uveitis continue and the vision remains impaired, granulomatous reaction should be suspected.

2. If the disease becomes bilateral before the first eye has responded, then granulomatous reaction should be suspected.

3. If the keratic precipitates become larger, more numerous, and of the mutton fat variety, granulomatous reaction should be suspected.

4. If the protein content of the aqueous diminishes, but the cells become larger and more abundant, a granulomatous reaction should be suspected.

5. If precipitates are found on the iris, either at its pupillary edge, or in the angle of the anterior chamber, or if found on the lens, granulomatous reaction should be suspected. Precipitates on the cornea or on the iris are of the same importance. They are made up of lymphocytes, plasma cells, and later macrophages and are deposited on the endothelial membrane either when the eye is at rest during sleep or because of the currents in the anterior chamber. The precipitates on the iris have been referred to as Koeppe or Busacca nodules.

6. If iris nodules are seen, granulomatous disease should be suspected. An iris nodule, a rare finding, is a focus of lymphocytes and plasma cells and is evidence of granulomatous disease within the iris. An iris nodule is not a precipitate. A precipitate may be deposited at the pupillary edge of the iris or on the iris itself and become covered with pigment and remain as a small round elevated mass above the surface of the iris.

7. If firm wide adhesions are forming between the pupil and the lens, granulomatous disease should be suspected.

To sum up, before discussing the etiology of anterior uveitis, too much emphasis cannot be placed on repeated studies of the clinical appearance of the eye. Reliance, however, should not be placed on memory alone; careful notes of every aspect of the examination must be made and from time to time a summary is essential. The same physician cannot follow a case of uveitis from beginning to end in a special clinic, and an important time at which further survey should be made or a change made in the treatment will pass by if the clinical appearance of the eye is not given repeated and adequate evaluation.

ETIOLOGY OF ANTERIOR UVEITIS

Nongranulomatous. For the good of the majority of patients, the etiology of this type of uveitis should be regarded as an allergic reaction. Except in Reiter's disease[3] or its association with ankylosing spondylitis there is no strong evidence that this type of uveitis is a part of any systemic

disorder. In view of the fact that anterior nongranulomatous uveitis can be produced experimentally, it is better to believe that there is a wide range of bacterial and nonbacterial antigens that can produce the disease in man.

Granulomatous. In spite of the fact that the distinction between nongranulomatous and granulomatous anterior uveitis is a rather tenuous one, and in recurrent nongranulomatous cases difficult to make, clinically the distinction is useful. A separation of the two types even in what seems to be strictly anterior uveal disease calls for a different approach in study and treatment.

It is best to associate anterior granulomatous uveitis, except in certain instances, with a specific systemic disorder. The causes of anterior granulomatous uveitis may be listed as follows:

1. Tuberculosis
2. Sarcoidosis
3. Syphilis
4. Brucellosis
5. Toxoplasmosis
6. Behcet's syndrome
7. Vogt-Koyanagi Harada syndrome
8. Sympathetic ophthalmia
9. Phacotoxic
10. Phacogenic

To provide the data that are necessary to rule in or rule out the systemic disorders or the local eye conditions that can generate a granulomatous reaction within the eye calls for an orderly and complete survey. A careful clinical examination of all parts of both eyes is desirable and an awareness of Behcet's disease or the Vogt-Koyanagi Harada syndrome will save time in fruitless investigations. The survey begins with the history, and Hughes[1] has written the following concerning the type of history:

"The general Medical History should explore rather thoroughly the possibility of any systemic disease which might cause the uveitis and correlate if possible the onset and exacerbations of ocular and systemic disease. The *family history* might well stress ocular disease and allergy. The *past history* should cover questions concerning febrile illness and night sweats; chronic diseases, including syphilis and tuberculosis; allergies such as hay fever, asthma and skin rashes; rheumatism, arthritis, and muscular aches; weight loss; undue fatigue and operations. *Systemic review* should include severe headaches; frequent upper respiratory infections or sinusitis; teeth; cold sores; cough; diarrhea; difficulties in urination; urethral or vaginal discharge. *Social history* might profitably include contact with the tropics, or close contact with animals and the consumption of raw milk or rare meat. The last medical check-up and findings would be of interest. The *ocular history* should stress onset of present illness, whether acute or chronic; pain; redness; blurring of vision; relation of ocular disease to systemic disease; duration; recurrences; treatment and its effects on the eyes."

The medical history and the physical examination should when possible precede any laboratory tests because at times clues may be found to give some directions to the remainder of the examination.

The laboratory tests that will be helpful in establishing a presumptive etiological diagnosis as well as giving information before certain treatments are undertaken are as follows:

A. Blood Studies
 1. Sabin-Feldman methylene blue dye test
 2. Hemagglutination tests
 a. Histoplasmosis
 b. Toxoplasmosis
 c. Brucellosis
 d. Coccidioidomycosis
 3. Platelet count
 4. Electrophoretic separation of serum
 5. Sickle cell preparation
 6. Electrophoretic study of hemoglobin
 7. Uric acid per cent in blood
 8. Latex determination
 9. B. U. N.
 10. L. E. preparation

B. Skin Tests
 1. P. P. D. No. 1
 2. P. P. D. No. 1½
 3. P. P. D. No. 2
 4. Toxoplasmin
 5. Histoplasmin
 6. Frei
 7. Brucellergen

C. Special Studies
 1. X-ray of skull, hands, and feet
 2. Kwein test
 3. Biopsy of lymph or conjunctiva
 4. Feces examination for blood, ova, and parasite
 5. Blood culture

The special laboratory tests, x-rays, skin tests, or biopsy reports that will support a good presumptive diagnosis for each of the etiological possibilities are as follows:

1. Tuberculosis. There is nothing distinctive in the ocular findings to encourage a diagnosis of tuberculosis. The so-called "typical findings" of

a few years ago of ocular tuberculosis of either the anterior or posterior segment now meet the criteria of a number of etiologies. A family history of tuberculosis, a positive skin test, a possible personal exposure to tuberculosis, and a chest x-ray showing infiltrations, fibrosis, or calcified areas support the diagnosis.

2. Sarcoidosis. Although a rare cause, sarcoidosis[2] must constantly be kept in mind. Sarcoidosis is a disease of unknown etiology characterized by the presence of a granulomatous reaction which may involve any organ or tissue in the body. The rural nature of the disease has been noted; it is world-wide in distribution, and in this country there is a 17 to 1 ratio of cases in Negroes to white persons. It may be completely asymptomatic until it involves the eyes, or the disease may already have been recognized because of pulmonary symptoms, fever, adenopathy, skin lesions, parotid gland swelling with seventh nerve paralysis, or, rarely, lesions of the terminal phalanges of toes and fingers. If the systemic disease is asymptomatic, but the ocular findings are those of a granulomatous, possibly bilateral anterior uveitis, a presumptive diagnosis of sarcoidosis will be supported by the following:

1. Chest x-ray findings compatible with a diagnosis of sarcoidosis. Enlargement of the right paratracheal lymph node is especially characteristic of sarcoidosis.
2. Peripheral adenopathy and lymph node biopsy findings compatible with the diagnosis of sarcoidosis.
3. Reversal of the blood albumin-globulin ratio.
4. Serum electrophoretic study which shows elevation of alpha 2 and gamma globulin fractions resulting in a step pattern.
5. Hypercalcemia.
6. Hypercalciuria.
7. Negative tuberculin test. There is some doubt that there is a positive anergy to tuberculin but rather a hypoactivity of the skin in sarcoidosis to many antigenic stimuli.
8. Positive Kewim test.
9. Biopsy of the conjunctiva.[4] Granulomas with epithelioid cells and lymphocytes without caseation were found in 27 per cent of sarcoid patients whether or not they had conjunctival disease. The taking of the biopsy is simple and may give a clue to diagnosis. This type of tissue investigation is to be preferred at first over lymph node biopsy.

3. Syphilis. It also is a rare cause of uveitis but must not be overlooked. In the presence of positive blood tests regardless of the stage of infection, a trial of penicillin therapy is justified except in the case of antibiotic sensitivity.

4. Brucellosis. There have been cases of uveitis reported in conjunction with systemic brucellosis. Though rare, the possibility must therefore continue to be considered. The presumptive diagnosis can be supported by a positive blood culture, positive blood agglutination tests, or a positive skin test, which indicates past infection. A history of ingestion of raw milk, living or visiting on a farm, and the occurrence of an obscure illness with fever lend support to the consideration of brucellosis.

5. Toxoplasmosis. It is in chorioretinitis that toxoplasmosis has been confirmed as an etiological agent. There are instances, however, when the anterior reaction is severe, and the vitreous is cloudy, that chorioretinal lesions can only be suspected. In many of these cases the presumptive diagnosis of toxoplasmosis is strong and treatment is justified.

A toxoplasmin skin test should be routine in the uveitis survey and if positive, a methylene blue dye or a blood agglutination test ordered. Any positive titer is significant. In the absence of other systemic diseases and with a positive skin test and a positive dye test or blood agglutination test, a presumptive diagnosis of toxoplasmosis is justified.

6. Behcet's syndrome. This disease[5] is rare and is recognized by the recurrence of its ocular features, and other associated lesions. There are no tests to establish the diagnosis. Rapid onset of a severe uveitis with pain at times and ciliary congestion characterize this disease. Varying degrees of loss of vision occur and within 24 to 36 hours, a hypopyon forms. The only case under observation in the Washington Hospital Center clinic has granulomatous characteristics. The iris has been difficult to dilate and many synechia have formed. With each attack the anterior vitreous is cloudy, although no chorioretinal lesions have been observed. The disease has attacked both eyes, and the lens of one eye is quite hazy. The intraocular pressure has been elevated during recent attacks, but it is controlled after the inflammation has subsided. This Negro male patient is 31 years of age and has had oral and genital ulcers. He has recently had leg muscle problems. The uveitis attacks have been terminated by large doses of oral steroids. Gamma globulin has not been given. Recent literature suggests that Behcet's syndrome, Stevens-Johnson syndrome, and Reiter's disease be grouped under the name of mucocutaneous-oral syndrome.

7. Vogt-Koyanagi Harada syndrome. This is a very rare chronic granulomatous uveitis, usually bilateral, said to resemble sympathetic ophthalmia.

Accompanying the uveitis there is patchy depigmentation of the skin, the eye lashes, and hair, with alopecia and hearing disturbances. The syndrome is recognized when most or all of the features are present, but no specific etiology has been established.

8. Sympathetic ophthalmia. The etiology remains unidentified, but it is a subacute or chronic granulomatous generalized uveitis. The sympathogenic uveitis develops in an injured eye or following an operation. The sympathizing eye develops the uveitis two weeks or more after the injury or operation. The diagnosis is based on the history and the clinical appearance.

9. Phacotoxic uveitis. Most surgeons are aware of phacotoxic uveitis. The picture of the hypermature lens with large mutton fat keratic precipitates is unlikely to be overlooked. No investigation is necessary to establish the diagnosis.

10. Phacogenic uveitis. Occasionally a subacute attack of anterior granulomatous uveitis is induced by minimum amounts of lens material being extruded through a small rupture in the lens capsule, even though the lens is relatively clear. The cause of the uveitis may not be immediately apparent, but if consideration is given to the age group in which this entity occurs, it is less likely to be missed. By the time the first attack of uveitis occurs there is already some cataract, and the cloudiness increases as the reaction subsides. A diagnosis is arrived at on the grounds of suspicion alone as there are no tests to support the etiology. Removal of the lens cures the uveitis and confirms the suspicions.

METHODS OF TREATMENT

An attempt should be made to initially dilate the pupil and to keep it dilated. If drops alone are not successful, a subconjunctival injection of 0.2 cc. of equal parts of atropine sulfate ½ per cent, Adrenalin Chloride solution 1:000, cocaine 4 per cent is given. The subconjunctival injection is repeated as necessary. Homatropine 5 per cent, Neo-synephrine 10 per cent, Cyclogyl 1 per cent, or atropine sulfate 2 per cent drops used two or three daily will maintain dilation. An extra attempt to provide a maximum dilated pupil is necessary when fundus examinations are to be made.

STEROID MEDICATIONS

Local steroids, subconjunctival injections. There is considerable choice in the preparations that are available for subconjunctival injection. However, the recommended amount of active steroid substance is 25 mg. of cortisone or its equivalent. A subconjunctival injection may be given at the initial visit and in severe cases repeated in four days and thereafter 7 to 14 days apart. The technic is simple, usually painless, and great use should be made of this method of getting steroids into the eye.

Local steroids, installation. All uveitis cases that show involvement of the anterior eye should receive steroid suspension or solution by drops frequently during the day and steroid ointment at bedtime. This is continued until all signs of anterior disease are gone. There is very poor penetration of steroids into the posterior eye when administered by drops or ointment, but the steroid may get into the posterior eye when given beneath Tenon's capsule. Methylprednisolone preparations are reported to have the best penetration power.[6]

Oral steroids. Oral steroids are never administered to any uveitis patient until the chest x-ray is reported and diabetes, peptic ulcers, and emotional disturbances are excluded.

When the clinic was first organized, oral steroids were seldom thought necessary in the treatment of anterior uveitis. This is no longer held true. When the necessary precautions have been fulfilled and the disease is still not quieting down properly, oral steroids are started immediately. If it is felt that the tuberculin, histoplasmin, toxoplasmin, and brucellergen skin tests may become important before the disease is under control, oral steroids are withheld until the tests can be completed. The dosage varies, but it is felt perfectly safe to give two tablets four times daily for a minimum of four days. Before any dosage reduction is made, the effect of the treatment is evaluated. The majority of patients with simple iridocyclitis will improve satisfactorily with the treatment, and the tablets can be slowly discontinued. If a high dosage has been given for a short period of time, it is safe to reduce the tablets rapidly. On the other hand, the greatest possible care should be exercised in reducing the dosage when high doses have been maintained for longer periods of time. The practice of giving ACTH as the oral steroid is being reduced has been discontinued.

There have been no serious side effects from the oral steroids. Very few of the patients have been under continuous oral steroid medication for longer than five months. A few of the patients have developed moon face and have had a rather mild or moderate retention of fluid which has disappeared as the medication was reduced or withdrawn. The training and confidence in the use of oral steroids that is received in the uveitis clinic is

almost necessary to their successful use in private practice. Small doses, except for maintenance purposes, will not produce the results that steroids are capable of producing. The side effects from short-term therapy are very few.

Potassium chloride 0.5 gm. to 1.0 gm. four times daily will take care of the extra loss of potassium. If the gain in weight is due to water retention, the patient must be instructed to reduce the sodium and water intake. Oral or mercurial diuretics have never been necessary in the clinic but should be used in preference to reducing the dosage of oral steroids below a level that is maintaining a quiet eye in a serious situation. The diet must also be regulated to moderate the increase in weight.

SPECIAL MEDICATIONS

Nongranulomatous anterior uveitis. The majority of attacks of iridocyclitis will respond to nonspecific medication. If the interval between attacks is long enough, no great damage will be done to the eye and again, the reaction in the eye is controlled by the same treatment.

If, however, the disease is not being controlled, or recurrences are frequent and sharp and permanent damage has occurred or is impending, then something more needs to be done. It is my belief that something is to be gained by a serious talk with the patient to discover if the recurrence can be related to a specific factor such as a respiratory infection, loss of sleep, emotional upset, too much drinking, too much smoking or exposure to smoke, exposure to dust like house cleaning, sweeping, dusting books or papers, exposure to domestic pets or birds, overeating or eating a particular kind of food. Every aspect of the patient's life and habits is worth inquiring into as the clue may be found from a most unexpected source.

Foci of infection must be searched for and treated. Vaccines made from sinus or throat cultures even when taken at time of surgery have not been helpful.

Finally, the patient must be sent to an allergist, preferably one who has had some experience with uveitis problems. The examination will reveal certain foods that the patient must not eat, various substances that the patient must not come in contact with and various air-borne allergens like dust and pollens for which the patient should receive desensitizing treatments for many months. The allergist will check the patient for bacterial antigens in a number of shotgun preparations. If necessary, the desensitizing antigens will be added to the treatment preparations. Woods'[10] suggestion of checking into streptococcus sensitivity in a well-laid-out program has not been carried out in the clinic. Antihistamine drugs should be added to the oral medications.

This type of approach to recurrent iridocyclitis will be successful in instances where the attacks do not wear themselves out. It is my belief that in indigent patients where the environment is impossible to control or where a good program cannot be successfully carried out, satisfactory results will not be achieved.

Granulomatous anterior uveitis. The current treatment for each of the systemic diseases with which this type of uveitis has been identified is as follows:

1. Tuberculosis. A proven regimen for tuberculosis is Isoniazid 100 to 200 mg. t.i.d. and Para-aminosalicylic acid (PAS) 2 to 4 gm. t.i.d. Hughes recommends that 25 mg. pyridoxine (vitamin B_6) twice daily be added to this regimen. If no improvement is evident within three weeks, other specific treatment should be considered. If a favorable response is obtained, treatment should be continued for six months or more.

2. Sarcoid. There may be times when treatment to a patient, known to have asymptomatic sarcoidosis, can be withheld. This does not apply when sarcoidosis is suspected of being the cause of uveitis. Unfortunately, there is no specific treatment, but on the other hand, steroids exert a suppressive effect on the disease and should be started promptly and in adequate dosage. Many months of therapy will be required and the maintenance dosage should be the least amount that will produce the desired effects. The eye reaction should quiet down and the vision improve, and if it does not, treatment should be stepped up. Local steroid drops and ointments should be supplemented by subconjunctival injections when necessary. If the response from one oral steroid is not satisfactory, perhaps another brand will work better or perhaps the addition of long-acting ACTH will help. Whether antituberculosis therapy should be used with the steroids is a point of debate. Before steroids are started, the chest x-ray should rule out active tuberculosis. During long-term steroid therapy, the chest x-ray and the skin tuberculin test should be repeated. If there is a change in the x-ray findings or if the skin tuberculin test becomes positive, the steroid therapy should be discontinued and antituberculosis drugs given.

3. Syphilis. The specific treatment for syphilis consists of penicillin or Terramycin. Penicillin in a large dose intravenously may be used for a very acute syphilitic-uveal infection.

4. **Brucellosis.** If active brucellosis should be accompanied by uveitis, the uveitis may be treated with a tetracycline, streptomycin, or sulfadiazine. If the etiological diagnosis of uveitis is entirely a presumptive one and the brucellosis is in a chronic stage, then a desensitizing program or the use of steroids is the only available treatment.

5. **Toxoplasmosis.** In the past few years there have been many studies to determine the best treatment for toxoplasmosis. The drugs used in these studies have been spiramycin, Daraprim, and sulfa. The conclusion reached by Fajardo et al.[7] in the latest of the studies from Wills Eye Hospital was that the combination of pyrimethamine, sulfa drugs, and steroids is more effective treatment than spiramycin and steroids or steroids alone. During the last year of the study the treatment employed was pyrimethamine 25 mg. four times daily for one day, 25 mg. three times daily for one day, and 25 mg. twice daily continued until the lesion was healed or the drug had to be discontinued because serious side effects were occurring. With pyrimethamine, one of the long-acting sulfa drugs was given, sulfamethoxypyridazine (Kynex) employing an initial dose of 1.0 gm. followed by a maintenance dose of 0.5 gm. daily (1 tablet). The sulfa drug was given a little longer than pyrimethamine. The treatment was continued for an average of 10 weeks. All the patients received one tablet of methylprednisolone (4 mg.) three times daily. Patients on this treatment had weekly blood counts including platelets, and weekly urinalysis. If the platelet count dropped to 100,000 per cc. or lower, or if the white blood count went down to 4,000 per cc., then intramuscular injections of Calcium Leucovorin (folinic acid) were given. The usual dose of Leucovorin was one to three ampules, each ampule containing 3 mg. of active drug. The injections were given daily for five days, and at seven days the blood counts were repeated. If the counts had not reached safe levels, the drugs were discontinued. If carefully planned, the drugs could be resumed at a reduced dosage. If spiramycin continues to be available in this country, it could be used as a substitute in as much as there are very few side effects from this drug. It might even be worthwhile to continue the sulfa drug by itself, as some treatment must be better than none at all.

BEHCET'S SYNDROME

This type of recurrent uveitis with hypopyon and mucous membrane ulcers must be diagnosed from the clinical picture, and there is no specific treatment. Local and oral steroids will control each attack, but there is bound to be accumulating damage to the eye until there is severe visual impairment. Gamma globulin has been reported as useful.

VOGT-KOYANAGI HARADA SYNDROME

The etiology of this chronic, bilateral uveitis has never been established. Fortunately, the disease is rare, because it does not respond to any treatment and blindness is the usual outcome.

SYMPATHETIC OPHTHALMIA

There is no specific treatment for sympathetic ophthalmia. Early enucleation of injured blind eyes will prevent the development of this miserable disease and local and oral steroids will prevent or delay its progress.

PHACOTOXIC AND PHACOGENIC

Intracapsular extraction of the lens under the most favorable conditions possible will cure all types of uveitis due to lens protein sensitivity.

POSTERIOR UVEITIS

With the possible exception of findings such as edema of the macula or blurring of the nerve head which can result from severe or prolonged anterior uveitis, most of the inflammations in the choroid or retina are granulomatous reactions resulting from systemic disease. The correlation of clinical findings, blood and skin testing with pathological data has resulted in fairly good proof that systemic disorders brought about by the following agents can induce inflammation of the posterior segment of the eye.

1. Protozoan: toxoplasmosis, amebiasis
2. Bacteria: tuberculosis, syphilis, brucellosis
3. Fungus: histoplasmosis
4. Parasites: Toxocara, Filaria, Cysticercus
5. Unknown Agent: sarcoidosis

The onset of an attack of chorioretinitis may be quite acute or surprisingly mild. To some extent the type of onset may be of value in determining the cause.

The acute exudative chorioretinitis which serves best of all as an example of posterior uveitis comes on abruptly. Black spots, cobwebs in vision, flashes of light, and general impairment of vision make the patient aware of trouble. Examination reveals serious reduction in vision if the lesion is in the macula. The vitreous will be quite hazy and the fundus indistinct. Edema of the retina calls attention to the area of involvement. There may be one or more new areas as well as some

scarred spots from previous attacks. The new foci may be at the edge or adjacent to a scar.

There may be no reaction whatsoever in the anterior eye, and yet at times with mild posterior disease, cells, increased protein, and keratic precipitates will be found with the slit lamp. The intraocular tension must always be watched. The onset and development of posterior uveitis in the above manner suggest toxoplasmosis, tuberculosis, or syphilis as the possible causes.

SYSTEMIC AMEBIC INFECTION

The association of systemic amebic infection and chorioretinitis was reported by Braley and Hamilton[8] and Harris and Birch.[9] The clinical picture was entirely different from acute exudative chorioretinitis, but the response of the lesion to specific treatment increases the necessity to consider amebiasis as a cause of chorioretintis.

SYSTEMIC HISTOPLASMOSIS

Woods and Wahlen[10] drew attention to the possibility of mild systemic histoplasmosis producing posterior uveitis. The clinical picture consisted of discrete, atrophic, sparsely pigmented or even unpigmented, peripheral chorioretinal lesions, along with a mildly active cystic chorioretinal lesion in the macula. No anterior eye involvement accompanied the posterior disease.

PARASITIC INFECTION

A chorioretinal infection by Toxocara, Filaria, or Cysticercus, though rare, must be considered if the clinical picture suggests it as a cause or when other possibilities have been ruled out.

Toxocara[11, 12] is the commonest of these parasites in this country and may produce an intraocular reaction resembling retinoblastoma or a generalized endophthalmitis.

ETIOLOGIC DIAGNOSIS OF POSTERIOR UVEITIS

The manner in which a diagnosis of systemic toxoplasmosis, tuberculosis, syphilis, and brucellosis can be established has already been considered under granulomatous anterior uveitis.

The diagnosis of intestinal amebiasis may be difficult but rests upon finding the amoeba in the stool examination. Examination of at least three specimens taken at two day intervals should be made.

TREATMENT OF POSTERIOR UVEITIS

The nonspecific treatment of posterior uveitis includes mydriatics, steroids by instillation, ointment, subconjunctival or subtenon's capsule injections, orally, or the use of ACTH. There is some evidence that intravenous typhoid vaccine may be indicated in posterior uveitis thought due to histoplasmosis.

The specific treatment for uveitis, if anterior, posterior, or combined when due to toxoplasmosis, tuberculosis, syphilis, or brucellosis, has already been suggested. The specific treatment for the remaining causes of posterior uveitis, amebiasis, histoplasmosis, Toxocara infestation, may be summarized as follows:

AMEBIASIS

The treatment of systemic amebiasis should definitely be in the hands of an expert. The drugs used are antibiotics, chemical amebicides, and arsenic derivatives. Since these drugs are potentially harmful, their effect must be followed very carefully and the treatment should be guided by an internist.

HISTOPLASMOSIS

The specific treatment of histoplasmosis should be to employ an antifungal antibiotic. The best-known one is amphotericin B, and because this drug is poorly absorbed from the intestinal tract, it has to be given intravenously. The administration of the drug must be carefully supervised and toxic manifestations are common. Special precautions in the use of the drug must be followed.

Fever therapy may be tried and histoplasmin desensitization has been recommended.

TOXOCARA INFESTATION

There is no specific treatment for a larva of *Toxocara* that has invaded the posterior eye and is producing a granulomatous reaction. Duguid[12] suggests that photocoagulation might be employed.

SUMMARY

This paper attempts to cover the practical aspects of uveitis. A classification is suggested in order to find a spot for the various types of uveal inflammation seen in a clinic.

It is suggested that acute iridocyclitis is by far the most frequent type of uveitis, and most cases respond well to nonspecific care. If the more persistent cases are considered to be allergic phenomena, investigation should be in that direction.

The systemic diseases which may cause anterior granulomatous uveitis as well as chorioretinitis are listed, and the available specific treatment is suggested.

An orderly and thorough survey is considered essential. The tests that are recommended are nec-

essary to support a reasonable diagnosis of a systemic disease and to permit certain drugs to be employed in the treatment of the disease. ★★★

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PROFESSIONAL DISAGREEMENT

At the Gate of Safety Hospital in Reggio Calabria in Southern Italy, Signora Franchesina went in to have her baby, and just before the delivery three of the hospital's gynecologists turned up to perform the operation. They couldn't agree whose patient the Signora was, what sort of delivery she should have, or what treatment was necessary. While Signora Franchesina and the hospital staff watched, the three doctors fell to fisticuffs. Finally the three brawlers had to be removed, still brawling, while a midwife successfully delivered the baby. The Signora and child were removed to a private bedroom, and in the three adjacent bedrooms were the three doctors—Professor Collea with a broken leg, Dr. Lagana with head injuries, and Dr. Evoli with internal injuries.

The Clinical Spectrum of Hyperthyroidism

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"Do not fear to repeat what has already been said."—René Theophile Hyacinthe Laennec.

"You must go to the wards of a hospital in order to learn disease and its treatment; for there only can you see the sick man, and inquire his symptoms, and give the remedy, and note its effects, and witness its success or its failure."—Peter Mere Latham.

This is a review and summary of the purely clinical manifestations of hyperthyroidism. Early descriptions of the disease are reviewed and quotations from these early descriptions are included. The usual clinical features are described in some detail. Some of the more pertinent reports on atypical and masked forms of hyperthyroidism are reviewed and common and uncommon atypical findings associated with the disease are summarized. The protean manifestations of the disease are emphasized.

IT IS WELL TO REVIEW from time to time the purely clinical manifestations of disease. The pattern of a disease may change. As the collective experience increases, new varieties of expression of disease processes are recognized. It has been a common occurrence in the evolution of knowledge of many diseases that the original "classic" descriptions were gradually modified as more and more "atypical" forms were recognized.

Signs and symptoms are the central matters of importance in medical practice. These bring the patient to the physician, and these lead the physician to the diagnosis and thence to the appropriate treatment. Laboratory studies can only be intelligently applied in the light of information gained from the signs and symptoms present. Experimental investigations regardless of their use in increasing knowledge and advancing medical progress are valuable to medical practice only as they shed light on the natural experiment in the sick human being. Medicine finally harks back to the individual physician talking to and examining the individual patient. All else is ancillary.

Hyperthyroidism is a disease of protean manifestations with a classical clinical form and many atypical and bizarre variations thereof. This is a review of the clinical expression of that disease.

CASE REPORT

"A woman, aged 20, became affected with some symptoms which were supposed to be hysterical. . . . Her health previously had been good. After she had been in this nervous state for about three months it was observed that her pulse had become singularly rapid. This rapidity existed without any apparent cause and was constant, the pulse being never under 120 and often much higher. She next complained of weakness on exertion and began to look pale and thin. Thus she continued for a year. . . . It was now observed that the eyes had assumed a singular appearance for the eyeballs were apparently enlarged so that when she slept or tried to shut her eyes the lids were incapable of closing. When the eyes were open, the white sclerotic could be seen to a breadth of several lines all around the cornea. In a few months, the action of the heart continuing with increasing violence, a tumor of a horseshoe shape appeared on the front of the throat in exactly the situation of the thyroid gland. This was at first soft but soon obtained a greater hardness though still elastic."

This report is from a paper "Newly Observed Affection of the Thyroid Gland in Females," by Robert Graves, M.D., which was published in the *London Medical and Surgical Journal* in 1835.[1]

Five years after Graves' report Carl A. von Basedow, a general practitioner in the town of Merseburg, Germany, first brought the same disease to the attention of physicians in Europe. A portion of one of his case reports is of interest.

"Madam F. felt herself very exhausted, suffered from an obstinate diarrhea, had night sweats, lost a great deal of weight, at which time the eyeballs began to protrude from the orbit. Patient complained of shortness of breath. She had a very rapid small pulse, a resounding heart beat. She could not hold her hands still. Spoke with striking rapidity. And she liked to seat herself (because she always felt burning hot) with naked breasts and arms in a cold draft."[1]

Because of these two reports, diffuse toxic goiter, or exophthalmic goiter, has since been referred to in England and America as Graves' disease and in Europe as Basedow's disease. Others had actually described the disease earlier. Noteworthy are Parry's descriptions of eight cases published in 1825 three years after his death.

COMMON SIGNS AND SYMPTOMS

The vivid clinical picture of fully developed hyperthyroidism described by early writers has been the paradigm of hyperthyroidism since. Such "textbook" cases can be diagnosed in five seconds at 20 paces. One does not need laboratory studies for anything but confirmation for the record. The gamut of symptoms commonly includes fatigue, weight loss (often with good appetite), rapid heart action, muscle weakness, heat intolerance, exertional dyspnea, emotional lability, and insomnia. Eye symptoms are itching, burning and diplopia. There is often diarrhea and abdominal pain. Physical findings include exophthalmos, thyroid enlargement, and tachycardia (the Merseburg triad). Lid lag, retraction of lids, extraocular paralysis, and peribulbar edema may be present. There is usually a fine tremor, a warm moist skin, a bruit over the thyroid gland, a wide pulse pressure, and often atrial fibrillation. With the exception of the ophthalmic findings, all of the symptoms and signs of Graves' disease can be attributed to excessive secretion of thyroid hormones.

In a series reported by Williams[2] the symptoms of nervousness, hyperhidrosis, heat intolerance, and palpitation were found regularly, being present in 88 to 99 per cent of cases. In the same series tachycardia, goiter, skin changes, and tremor were the most frequent physical findings, all being found in over 97 per cent of cases.

USUAL ONSET AND COURSE

Typically, the onset of classic exophthalmic goiter consists of the gradual and simultaneous development of enlargement of the thyroid, eye abnormalities, and the symptoms of thyrotoxicosis. It may begin so insidiously that the patient has difficulty in dating the duration of symptoms. Friends or relatives sometimes note eye signs, goiter, or nervous phenomena before the patient himself is aware of any change from his normal state. On the other hand the onset may be abrupt and explosive. Full-blown exophthalmic goiter has been known to develop in a person previously well in as short a period as two to five days.[3] Toxic nodular goiter as a type tends to have a slower and more gradual onset.

Often the disease seems to be precipitated by some stressful situation, especially that involving psychic stress. I have seen two patients in whom the disease began while they were on a low caloric reducing diet. Weight loss continued after normal or hypernormal caloric intake was resumed. Means[3] reported a number of similar cases.

There is some tendency to self-limitation of the disease. Spontaneous remissions and exacerbations occur. More often it pursues a relentlessly progressive course until treatment is begun or death occurs. But untreated cases lasting more than 40 years have been recorded.[2] In a few instances it disappears spontaneously. In such cases thyrotoxicosis may be superseded by myxedema.[3]

MAJOR FINDINGS

The patient is characteristically alert, restless, unable to sit still, and although he complains of fatigue and weakness, he is constantly active even while feeling exhausted. He does not sleep well though he feels the need of sleep. Even if proptosis and clear-cut lid retraction are absent there is apt to be a preternatural brightness to the eyes.

Eye changes may or may not be present. The most common are widening of the palpebral fissure, exophthalmos, and stare. Winking is infrequent and the upper lid may lag on downward rotation of the eyeballs. Excessive tearing, burning, and stinging of the eyes are common. Vision may be blurred and diplopia present. Conjunctival injection and chemosis are present in severe cases. Extraocular palsies may develop with weakness of convergence and strabismus. Corneal ulcers occur. In severe cases the lids close incompletely in sleep. In some instances the ophthalmopathy progresses in spite of adequate medical or surgical control of the other manifestations of the disease.

Skin changes are characteristic. The skin is hot, moist, fine, and smooth. The nails tend to be friable. Plummer described the change in which the nail tends to separate from the distal nail bed giving a concave or wavy margin to the

terminal portion in contact with the nail bed. The scalp hair is fine in texture and friable. Gynecomastia, telangiectasia, and liver palms are less frequent findings. Swelling of the legs, usually without pitting edema, is often present. Localized myxedema is an unusual finding consisting of mucinous swelling of the corium in patches with elevation of the overlying skin. The skin has a pitted, often erythematous, "orange peel" appearance.

Thyroid enlargement in Graves' disease is classically diffuse. The gland is smooth and rubbery. Those with nodular goiter and hyperthyroidism have usually had goiters for years before hyperthyroidism developed. Rarely, no thyroid enlargement is present.

The cardiovascular manifestations of thyrotoxicosis reflect the hypermetabolism present. Tachycardia, systolic hypertension, wide pulse pressure, and a forceful, diffuse apex impulse are characteristic. When cardiac decompensation occurs, it is of the "high output" type. Atrial fibrillation is relatively frequent; atrial flutter occurs occasionally.

Nervous manifestations are numerous and varied. The tremor is usually fine and rhythmical, but may be coarse. Reflexes tend to be hyperactive. Reaction time to stimuli is reduced. Wide emotional swings occur. Agitation, delirium, and toxic psychosis may develop.

Hyperphagia, weight loss, abdominal pain and diarrhea are the most frequent gastrointestinal manifestations.

Weakness and fatigue are common. The muscle mass may be reduced considerably. Severe myopathies are occasionally seen with muscle atrophy of marked degree.

Decreased glucose tolerance, splenomegaly, scanty and irregular menses, and amenorrhea are often seen.

ATYPICAL AND MASKED FORMS OF HYPERTHYROIDISM

In recent years there has been increasing recognition of atypical forms of hyperthyroidism. The modern laboratory tests of thyroid function have been of great value in establishing the diagnosis in such cases. However, the clinicians of the last century were aware of many variations from the classical picture. Trousseau in 1862, Marie in 1883, and Charcot in 1885 described incomplete forms of the disease ("formes frustes") in which one or more of the usual signs or symptoms were absent.[4] The term masked hyperthyroidism has been applied to atypical and obscure cases of the disease. Three general types of masking are found: (1) cases in which thyrotoxic signs and symptoms are present but are overshadowed by prominent findings of other coincidental disease; (2) cases in which the symptoms referable to one system are prominent and suggest disease of that system (the monosymptomatic form), (3) cases in which most of the so-called classic features are absent.

Certain patients, especially but not exclusively the elderly, respond to the disease with apathy rather than activation. In these cases, which were first emphasized by Lahey,[5] the hyperthyroidism is manifested by lethargy, placid facies, depressed mood, and mental and physical inertia. This response alone may serve to mask the disease and make difficult the diagnosis. When apathy occurs in combination with other types of masked hyperthyroidism, the diagnostic difficulty is compounded.[6]

Probably the most common variety of masked hyperthyroidism is that in which cardiovascular symptoms predominate.[7] In these cases cardiac symptoms are so prominent that the underlying thyroid disease is overlooked. Heart disease without obvious etiology, congestive heart failure resistant to the usual measures, and atrial fibrillation in which the ventricular rate fails to slow with digitalis therapy should alert the clinician to the possibility of occult hyperthyroidism. Bortin *et al.*[8] have suggested that all patients with atrial fibrillation should have thyroid function studies regardless of the presence or absence of other signs of thyrotoxicosis.

A second common type of hyperthyroidism is that in which gastrointestinal symptoms are the obvious manifestation. Hamburger and Lev[9] in 1930 reported cases masked by prominent gastrointestinal symptoms. The characteristic symptoms are abdominal pain, diarrhea, nausea, vomiting, and weight loss. A case has been reported in which the patient was subjected to exploratory laparotomy for undiagnosed abdominal pain which later proved to be due to thyrotoxicosis.[10]

Another masked form of the disease is that in which neurological or psychiatric symptoms are outstanding. Thyrotoxicosis may present as psychoneurosis. Perhaps most patients with the diagnosis of neurosis should have at least one or two screening tests for thyroid disease. An occasional patient will turn out to have thyrotoxicosis. Certainly this possibility should be in the clinician's mind. Overt psychosis or thyrotoxic encephalopathy is perhaps an even more confusing manifestation. Here agitated delirium and later coma are apt to

be the overriding symptoms. Restlessness, insomnia, psychic disturbances, choreiform movements, loss of initiative, intense muscle weakness, loss of reflexes, and even definite muscle paresis occur. Waldenstrom[11] has described in detail such cases. Cases simulating Parkinsonism with intention tremor and "cogwheel" motions have been reported.[12] Chapman and Maloof[10] reported a case in which the onset of hyperthyroidism was initiated by convulsive seizure. The electroencephalogram was abnormal. After treatment with radioactive iodine there were no further seizures and the electroencephalogram reverted to normal.

The combination of hyperphagia, weight loss, and decreased glucose tolerance may lead to the erroneous diagnosis of diabetes mellitus.

Periarthritis of the shoulder has been a "red herring" in a number of reported cases of thyrotoxicosis. Chapman and Maloof[10] reported a case of subachromial bursitis which cleared with disappearance of calcification after treatment of hyperthyroidism. They noted that subachromial bursitis had been coexistent in about 4 per cent of patients with hyperthyroidism. They quoted Meulengracht and Schwartz that 27 per cent of patients with tendonitis or bursitis of the shoulder have some form of thyroid disease, and mentioned Skillern's statement that periarthritis was resistant to all forms of therapy until the hyperthyroidism was controlled.

The symptoms of osteoporosis may dominate the clinical picture in thyrotoxicosis. Calcium and phosphorous loss is an established fact in hyperthyroidism. A number of writers have reported symptoms of osteoporosis as the major manifestation of the disease.

Chapman and Maloof[10] reported a case in which marked pitting edema of the ankles, legs, sacrum, and hands was the chief complaint. There was no evidence of renal or hepatic disease or of congestive heart failure. Thyroid studies indicated hyperthyroidism. After treatment with radioactive iodine the edema disappeared.

THYROTOXICOSIS IN THE AGED

Hyperthyroidism in the elderly is particularly apt to be atypical. Bartels and Kingsley[13] mentioned lack of tachycardia, lack of stimulation, and the presence of apathy. Iversen[14] noted absence of eye signs, absence of palpable goiter, presence of nodular type goiter, and more frequent cardiac disturbances as typical of this group. An apathetic response as previously alluded to is especially likely to occur in the aged.

THYROID STORM

Thyroid storm represents a profound exaggeration of the usual symptoms of the disease. There is usually marked irritability, apprehension, restlessness, and prostration. Delirium, coma, and prostration may supervene. Marked tachycardia is present. The hallmark is hyperthemia with temperatures sometimes exceeding 106°. This picture may be readily confused with an acute infectious process as Waldenstrom[11] noted. Surgery (especially thyroidectomy), infections, emotional stress, and the withdrawal of iodides are prone to precipitate storm. An apathetic variety of storm occurs with a gradual unactivated fading away into coma and death.

HYPERTHYROIDISM MARKED BY DRUGS

It should be mentioned that the diagnosis of hyperthyroidism may be obscured by the administration of various drugs. The modern tranquilizers prescribed for what has been interpreted as neurosis may hide the true diagnosis. Reserpine especially may serve to block all of the usual signs and symptoms of thyrotoxicosis.[15]

CONCLUSION

The pleomorphic clinical spectrum of hyperthyroidism has been reviewed. Whishaw's[16] comment on the voluminous literature of goiter bears repeating: "The reason perhaps is that toxic goiter is so protean in its manifestations as to resemble syphilis in that regard."

Medical Arts Building

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THE RETRIEVAL GAP

U. S. scientists are dismayed at the paltriness of the expenditure —$7,000—the House has just approved for a study on cataloguing and retrieval of research information. Ninety per cent of all the natural scientists who have ever lived are alive today, and they are writing over one million articles a year in 15,000 scientific journals. The U. S. Government is currently involved in some 130,000 research and development projects, and it has found it impossible to avoid duplication. A recent General Accounting Office report showed that two Government agencies had been working on the same missile type for more than a year before the duplication was discovered (Air Force's Atlas Mega and NASA's Atlas Agena B). The problem is worldwide. Russia for several years has had a highly efficient data processing center which catalogues scientific reports from all over the world. Information published in English scientific journals can be obtained faster from Moscow than from Great Britain.

Radiologic Seminar XVII: Navicular Fracture

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FRACTURE OF THE CARPAL navicular is the most common of the carpal injuries. The carpal bones are interposed between the hand and forearm and act as buffers when force is transmitted upward to the forearm. Consequently, most fractures of the carpal navicular are caused by indirect trauma transmitted upward from the hand.

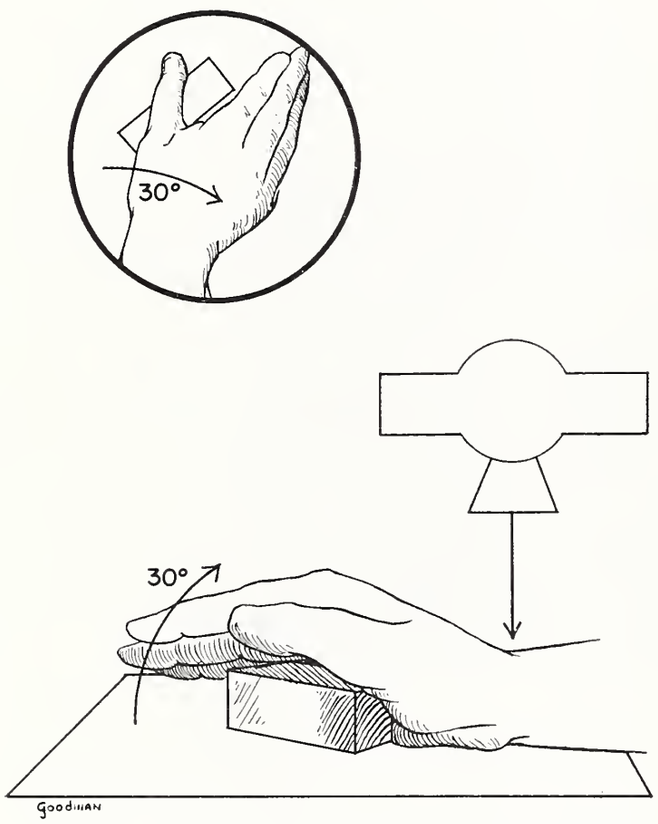


Figure 1. Radiographic positioning for optimal visualization of carpal navicular.

The navicular articulates with five of its neighbors devoting the greater part of its surface to these articulations. Ligaments attaching to the dorsal and volar aspects leave only a small area of cortex for periosteal covering. The bone architecture consists of an abundance of cancellous tissue covered by a thin cortex. Two or three vessels supply the carpal navicular with radiating branches to nutrient foramina placed at the tuberosity and along an oblique dorsal groove in the bone. The number of vessels and their sites of entry are subject to congenital variations, and 13 per cent of patients do not possess an artery in the proximal part of the bone. This blood supply of the carpal navicular is easily disturbed by injury.

A fracture of the navicular may not be visible in either the posteroanterior or lateral films.

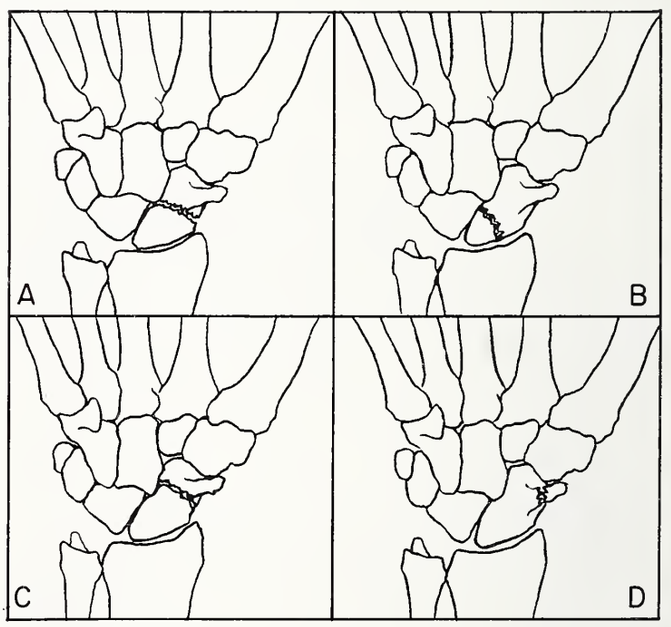


Figure 2. a. Fracture of waist. b. Fracture of proximal end. c. Fracture of distal end. d. Fracture of tuberosity.

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, University Medical Center, Jackson.

An appropriate positioning of the hand and wrist is obtained by placing the wrist in a posteroanterior plane, with the hand in ulnar deviation, and raising the radial side of the carpus 30 degrees (Figure 1). A fracture which is not seen on first examination will be shown often after a lapse of 14 days, but meticulous attention should be given to filming in various oblique positions at first examination when fracture of carpal navicular is suspected. Carpal navicular fracture sites involve the waist, the proximal end, distal end, and the tuberosity (Figure 2). Waist fractures (Figure 3) are often difficult to delineate, while those of the proximal end are more apparent radiographically. A fracture of the distal end extends across the



Figure 3. Radiograph displays typical navicular waist fracture.

whole width of the bone but like waist fractures is also difficult to detect. The tuberosity fractures are easily detected, and since the fragment is adequately supplied with blood, its fractures always heal.

Initially the fracture appears as a thin fissure in cancellous bone and cortex. Angulation and/or separation of the fragments may range from minimal to apparent. In some modes of injury, an impaction fracture may present as a zone of increased density. After about two weeks a few of the trabeculae are absorbed at the surface of the fracture, and the line is easier to detect. After six weeks the absorption of the fracture surface has progressed, and the cancellous bone resorption may present as a cyst-like cavity. Occasionally the surfaces of the fracture become increasingly dense, signifying a pseudo-arthrosis development. The changes in the bone fragments incident to blood supply damage are apparent as a relative increase in density of the affected fragment (Figure 4). The increased density of the distal fragment is often partial and inconspicuous. The evidence of

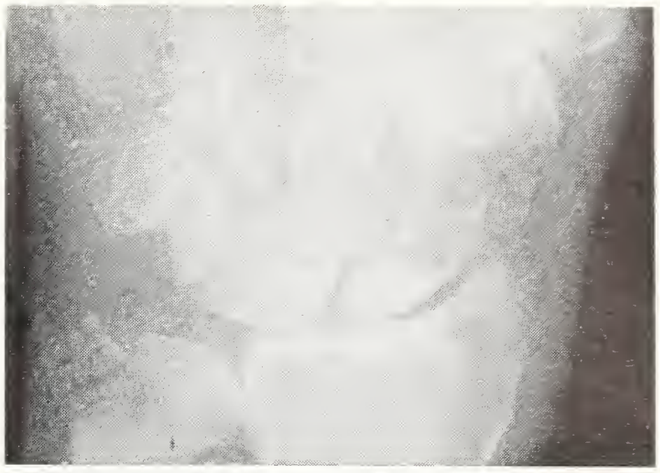


Figure 4. Note increased density of proximal end of navicular from vascular change following previous fracture.

aseptic necrosis of the proximal fragment is more obvious, for in addition to sclerosis there is alteration of the internal architecture, whereupon the contour becomes irregular, and the bone fragment shrinks in size (Figure 5). Aseptic necrosis is not always further complicated by nonunion, but it inevitably delays union. A fracture may be followed by osteoarthritis, particularly if there is nonunion or aseptic necrosis. This condition is often accompanied by cartilage loss from the articular surfaces.



Figure 5. Note shrunken distal fragment from old aseptic necrosis.

The incidence of failure to radiographically delineate a navicular fracture, together with the possibilities of nonunion and necrosis of fragments, makes this a clinical entity worthy of consideration in cases of upper extremity trauma and even the clinical "sprain." ★★★

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Carcinoma of the Penis

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I HAD BEEN ASSOCIATED with medicine, first as a student, then as a practitioner, for 32 years without seeing a case of carcinoma of the penis until April of 1962. Since that time, I have seen three cases of my own and one case presented to the Greenwood Leflore Hospital Tumor Clinic. A search of the hospital records showed two more cases, one in 1958 and one in 1954. A report of these cases follows, along with a discussion of different aspects of this disease.

The incidence of carcinoma of the penis varies with the hygiene and economic standards of the communities in which it occurs. In the United States the carcinoma of the penis accounts for 2 per cent of male carcinomas. This may be compared with a 1½ per cent incidence in England and an 18 per cent incidence in China. The author discusses the anatomy and diseases of the penis and considers the etiology, diagnosis, and treatment of carcinoma of the penis. He presents six case reports.

CASE REPORT 1

The first patient was a 57-year-old white male, admitted to the Greenwood Leflore Hospital, April 26, 1962, with a lesion on the under surface of his foreskin that he had noticed for several weeks. It worried him because he thought it was a recurrence of an old case of well-treated lues. Examination showed a fungating lesion ¾″ x ½″ on the under surface of his foreskin. No ulcer was present. There was possibly a kissing lesion on the glans. There was no excessive adenopathy. On April 26, 1962, under local anesthesia, a biopsy was done. The pathological report was squamous cell carcinoma of the penis, verrucous, papillary type, well differentiated.

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He was treated by x-ray therapy with some irradiation reaction, but good regression of the lesion. He was readmitted to the hospital June 25, 1962, with a 1″ x 1″ ulcer on his foreskin due to irradiation necrosis. He was unable to retract his foreskin at the time. On June 26, 1962, a circumcision was done. The tumor had disappeared and was replaced by scar tissue. The pathological diagnosis was foreskin with acute and chronic inflammation and ulceration. No tumor cells were seen. The patient was seen Sept. 24, 1962. The lesions had all healed, the circumcision had healed, and there was no adenopathy in the inguinal region. This patient will be followed periodically.

CASE REPORT 2

The second case was a 62-year-old colored male, who was admitted to the hospital July 13, 1962. He gave a history of being unable to retract his foreskin for several years. His foreskin had been sore for several months. An attempt to retract caused it to crack and bleed a little. He had had several wives and girl friends. His VDRL was nonreactive. He gave a history of cardiovascular renal disease with hypertension and coronary insufficiency. Physical examination showed phimosis. There was a wart-like growth surrounding the edge of his foreskin. The edge of the foreskin was split with several fissures due to efforts to retract the foreskin. There were scars in the inguinal region at the site of previous infections, and inguinal glands were felt, but there were no more than are usually found.

On July 14, 1962, a circumcision was done. A fungating lesion of the glans and deep pocket of the foreskin was found. The deep portion of the foreskin had become annealed to the sulcus and to the corona. The pathological diagnosis was squamous cell carcinoma of the penis, predominately of the verrucous type, moderately undifferentiated. He was treated with x-ray irradiation locally. He was seen Sept. 24, 1962, with a superficial ulcer at the tip of his glans, about a

centimeter across, which was healing. The rest of the radiation reaction had subsided, the tumor had disappeared, and the inguinal adenopathy was smaller.

CASE REPORT 3

The third patient was a 70-year-old colored male, who was admitted to the Greenwood Leflore Hospital Aug. 22, 1962. He had noticed a small bump on the glans of his penis that had grown very little since he first saw it. He had had at least two wives. Examination showed a papillary growth to the left of the urethra on the glans, ¾ x 1 cm. There was no unusual inguinal adenopathy. His VDRL was nonreactive. On Aug. 23, 1962, the small tumor was excised with a good margin of normal tissue, and the patient was circumcised with a gomco clamp, which, by the way, worked very well under local anesthesia. He said that he experienced no pain during the entire procedure. Pathological diagnosis was squamous cell carcinoma of the penis, verrucous or papillary type, with no tumor in the foreskin. There were inflammatory cells beneath the tumor, which the pathologist said was a good sign. The tumor was well differentiated. He was followed up Sept. 24, 1962. The incision had healed, there was some slight irritation of his glans, and the lymphadenopathy was less than before the operation.

CASE REPORT 4

The fourth case was presented to the Tumor Clinic. He was a 71-year-old colored man admitted to the hospital Aug. 14, 1962. He had had a sore on his penis for five years, which he had treated with healing powder and calamine lotion. He had recently developed dysuria. Examination showed a granulating, ulcerated lesion of his foreskin. His meatus was open and not involved, and there was no inguinal adenopathy. His VDRL was reactive in four dilutions. On Aug. 15, 1962, he was treated with a wide circumcision. Pathological diagnosis was squamous cell carcinoma, moderately well differentiated, ulcerative type. The section of the foreskin showed a good margin of normal tissue, so no further treatment was carried out. When last seen, his wound had healed well with no sign of recurrence.

CASE REPORT 5

The fifth case was a 66-year-old colored man, who was admitted to the Greenwood Leflore Hospital on Feb. 24, 1958. He complained of a knot in the shaft of his penis of two or three weeks duration. He was able to void satisfactorily. The physician was unable to pass a sound. He gave no history of trauma, no history of venereal disease. His Kahn test was negative. Physical examination showed a pecan-size mass at the base of his penis. It was hard and fixed to the subcutaneous structures, but not to the skin. It was nontender, nonfluctuant, noninflammatory. On March 1, 1958, a biopsy was done. Grossly, the mass extended into the urethra. The urethra was entered while doing the biopsy, so that a suprapubic catheter was inserted. The diagnosis was squamous cell carcinoma of the penis, grade two. It probably arose from the urethra. He was treated by x-ray irradiation from March 10 to March 21, 1958, with six exposures to the penis and four to the anterior perineum. The suprapubic catheter was removed before he was discharged from the hospital. The last record I could find was dated Dec. 4, 1958 and said that the tumor had healed well and was asymptomatic until he caught a fold between his penis and scrotum in a zipper and injured it. The injury became infected and developed a 1″ x 3″ ulcer. I do not know the fate of this ulcer.

CASE REPORT 6

The last case was done as an out-patient in the Greenwood Leflore Hospital on Feb. 10, 1954. The notation was, "Removal of tumor of the penis under local anesthesia." The pathological diagnosis was epithelioma with inflammatory reaction. The specimen was 6 mm. in diameter. The surface epithelium on section was ulcerated. The physician could find no further follow-up on this patient. But I found a record in the hospital where his wife had had a baby in 1962, at which time the patient was 36 years old. This made him 28 years old when the operation was performed. He must be well now to have so recently become a father.

DISEASES OF THE PENIS

The phallus is heir to all the diseases of the integument as a whole plus a few exclusives of its own. It is beset by diseases from scabies and insect bites to carcinoma and melanoma, not to mention the ever present hazard of the zipper. Most of these diseases must be considered in the differential diagnosis of carcinoma.

The inflammations include simple balanitis from poor sexual hygiene, or just plain poor hygiene; balanitis from gonorrhea with a redundant foreskin or with phimosis; fusospirochetosis which may be quite severe and which resembles the Vincent's angina seen in the mouth; chancre; chancroid; lymphopathia venereum; granuloma inguinale; herpes and infected sebaceous cyst.

Other diseases include papilloma, condyloma acuminatum, Peyronies disease (a plastic endura-

tion which is treated by irradiation or surgical excision), exudative discoid and lichenoid chronic dermatosis, lichen planus, psoriasis, lipoma, fibroma, angioma, verruca, and the premalignant lesions, leukoplakia, erythroplasia of Queyrat, and Bowen's disease. The last two are carcinoma in situ. Bowen's disease is probably the same thing as erythroplasia which is so-called when it appears on the penis. Erythroplasia of the glans is a well-circumscribed lesion with a dark, velvety appearance.

Malignant lesions include sarcoma, fibrosarcoma, Kaposi's sarcoma, endothelioma, and malignant melanoma. Other lesions are balanitis xerotica obliterans (a plaque-like lesion), metastatic carcinoma, and primary carcinoma.

ANATOMY OF THE PENIS

The penis is a pendulous organ, suspended from the back and sides of the pubic arch. It contains the anterior urethra and is composed of three masses of cavernous tissues—the two lateral corpora cavernosa and ventral to them the corpus spongiosum, which contains the urethra. Each of these masses of tissue is invested with fascia, known as the tunica albuginea. The corpus spongiosum enlarges at its base to accommodate the bulbos urethra. Distally, it has a cone-shaped enlargement known as the glans, which fits over the ends of the corpora cavernosa like a cap. At the proximal portion of the glans is a ridge known as the corona. Behind this is an indentation known as the retro-glandular sulcus. At the tip of the glans is the meatus of the urethra. The three cavernous bodies are covered with thick fascia, known as Buck's fascia. Superficial to this is the superficial fascia which is quite distensible. Surrounding the whole organ is the skin, which is quite thin and quite elastic. The subcutaneous tissue contains no fat. Distally the skin is redundant and folds over itself to form the prepuce, the sac which encloses the glans. The inner layer of the prepuce contains glands which secrete smegma.

At the under edge of the meatus of the urethra the foreskin folds on itself to form the frenulum. The lymphatics of the skin and the prepuce travel in the superficial fascia outside of Buck's fascia and drain into the upper inner superficial lymphatics of the inguinal region and to the deep inguinal lympatics. The lymphatics of the glans, the corpora, and the urethra drain under Buck's fascia to the deep inguinal nodes and the external iliac nodes. Some of the lymphatics follow the inguinal channel under the spermatic cord, and end in the extreme retro-femoral lymph nodes. The lymphatics of the urethra and corpora cavernosa usually end in the deep inguinal nodes. There is a rich communication between the right and the left inguinal lymphatic systems.

The superficial venus drainage of the penis is the superficial dorsal vein which can be seen through the skin. It is in the mid-line in the superficial fascia, draining the skin and foreskin and dividing posteriorly to empty into the external pudendal veins of the thigh. The deep dorsal vein runs beneath Buck's fascia backwards under the pubic arch to the internal pudendal plexus. This vein drains the glans and the corpora.

INCIDENCE IN ETIOLOGY

The incidence of carcinoma of the penis varies with the hygiene and economic standards of the communities in which it occurs. In England the incidence is 1.5 per cent of male carcinomas. In the United States, it is 2 per cent of male carcinomas, most of the cases being in foreign-born and colored people. The disease occurs five times more frequently in the colored than the whites. The incidence in Sweden is 2.1 per cent of male carcinomas. The Mayo Clinic has a rather high figure of 2.94 per cent of male carcinomas. In Puerto Rica, 3.4 per cent of the admissions to a tumor hospital in San Juan were afflicted with the disease. The percentage in Europe gets as high as 5 per cent. The highest is in Asia. The incidence in China is over 18 per cent, or about five times the incidence in the United States. In Siam, Tonkin, and Java the incidence is nearly 19 per cent.

In the Puerto Rican state cancer registry for a 12-year-period, there were 4.32 cases in every 100,000 males. However, in males over 19, there were 9.6 cases in every 100,000 males. The medium age group of all males here was 18.1, 7 per cent being over 59. In the 80 to 84-year-old group, there were 56.36 cases per 100,000 population. On the other hand, in the Connecticut cancer registry from 1935 to 1951, there was only one case in 100,000 males. The median age of all males here was 31.35, while 11.6 per cent of them were over 59. In the 80 to 84-year-age group, there were 16.7 cases per 100,000 males, so that in Puerto Rico and the United States the maximum rate of carcinoma of the penis occurs in the 80 to 84-year-age group.

In one group of 45 cases, the youngest patient was 22 years old, the oldest was 92, and the median age of those affected was 57.5.

I have found only two cases reported in circumcised male Jews, and one of these was 73 years old. The disease does occur in circumcised men,

however. The reason circumcision helps prevent the disease is probably due to improved hygiene and cleanliness. Circumcision in itself does not prevent carcinoma, nor does it insure good hygiene. The Moslems, who circumcise around the age of 10, are afflicted with the disease. The lateness of the circumcision could have something to do with this, but Jewish males might also have some resistance to carcinoma of the penis, just as the Jewish females have resistance to carcinoma of the cervix. However, the incidence in everybody who is circumcised is much less than those who are not circumcised. Poor hygiene, with the irritation from the smegma bacillus and retained secretions, must play an important part. The premalignant lesion leukoplakia is caused by chronic irritation. However, the premalignant lesion erythroplasia, which resembles Bowen's disease, is not due to chronic irritation.

PATHOLOGY

Carcinoma of the penis arises from the foreskin, glans, the retro-glandular sulcus, rarely from the shaft, and in a small percentage of cases from more than one site. Carcinoma of the anterior urethra rarely occurs, but it does occur in the posterior urethra, usually at the site of a stricture, or due to gonorrhea or trauma. Metastatic tumors of the penis may also occur. Grossly the tumors may be proliferative or ulcerative. The proliferative tumor usually starts with a warty growth and may get to a very large size and involve almost the entire shaft. They rarely invade the corpora or the urethra, but may become secondarily infected and quite foul. Glandular metastasis is not as common as in the ulcerated type. This tumor is usually a well-differentiated papillary squamous tumor with the same pattern as the verrucous squamous carcinoma of the buccal mucosa. Local excision usually takes care of these tumors.

The other type of tumor is the ulcerative type, which may destroy the glans and the foreskin. It invades the corpora and the urethra, and metastasis is common. It is a much more severe lesion than the proliferative type.

The exophytic tumors may progress until they are also ulcerated. Both get infected, and both may bleed quite freely. This secondary infection causes inguinal adenopathy not due to metastasis, but due to infectious adenitis.

METASTATIC SPREAD

The spread is mainly through the lymphatics to the inguinal nodes, deep and superficial, and into the ileo-inguinal nodes. Lesions on the prepuce and skin tend to spread to the superficial and deep inguinal; those of the glans, the corpora, and urethra tend to have deeper metastasis. Distant metastasis is rare, but metastasis does take place from the veins of the penis through the pudendal plexus and rarely through the vertebral vein. Distant metastasis to the lungs, abdominal nodes, and liver is rare.

The ulcerative lesions have a greater tendency to metastasize than the proliferative lesions. Inguinal nodes may be the first thing noticed in carcinoma of the penis. The nodes may become fixed and even ulcerate and bleed. Due to phimosis or redundant foreskin, the nodule or ulcer may be overlooked until far advanced. Secondary infection usually takes place. In any case of balanitis that does not clear up in a short time under treatment, a dorsal slit should be done, and if a suspicious lesion is found, a biopsy done. Lesions are usually many months old before they are discovered. A lesion presents no pain before ulceration or infection. About a third of the cases have no metastasis when first discovered. However, 10 or 15-year-old cases have been reported with no metastasis. If no nodes are felt, the possibility of metastasis is low. However, palpable nodes containing metastasis may first become evident after the local lesion has been treated. In one series of cases, 75 per cent of the nodes were enlarged. Only 50 per cent of these showed metastasis. In other words, 37.5 per cent nodal involvement was present.

TREATMENT

Circumcision is prophylaxis for carcinoma of the penis and good penile hygiene. For a time, the treatment of carcinoma of the penis caused much disagreement. Some believed in radium, some in x-ray, some in surgery, and some in a combination. Some believed in x-ray only when surgery failed, and in surgery only when x-ray failed. But the treatment recommended by Marcial and associates[1] seems sound. For small three centimeter or less tumors, irradiation is recommended, either as radium mold or x-ray. Implantations are not recommended. The irradiation should be given over a comparatively short period of time to cut down radioresistance. Radiation necrosis can take place, but it can usually be handled by conservative means. More extensive lesions are treated by amputation, at least two to three centimeters proximal to the tumor. More advanced cases must be treated by a complete emasculation with a perineal urethrotomy.

In cases with palpable nodes, the treatment is not as standardized. Judgment is required whether to do a radical dissection or not. Marcial[1] recom-

mended waiting two to three weeks after the primary treatment, and if the papable nodes were still present and suspicious, doing a radical inguinal dissection. In their series, palpable inguinal tumors were present at this time in 32 per cent. The nodes that developed after local treatment are treated by radical groin dissection. In these cases, positive nodes were found in over 42 per cent.

In radical node dissection, the superficial inguinal nodes are cleaned out along with the fat, connective tissue and fascia, including the fascia lata, in the upper part of the thigh. The inguinal ligament is cut close to attachment to the ilium and the muscles are separated from it. The muscles and ligament are retracted medially and the nodes are dissected free, beginning at the bifurcation of the aorta, and continuing down around the femoral vessels. At the conclusion of the procedure, the inguinal ligament is resutured to the ilium, the muscles are sutured to the inguinal ligament, and the sartorius muscle is cut at its upper end and attached to the inguinal ligament to cover the femoral vessels and nerves. The complications after this procedure are infection, bleeding, and necrosis.

Riveros and Gorastiaga[2] of Paraguay recommended partial amputation or complete amputation combined with very radical lymph node dissection, which could be done in one or two stages. They had a 5 per cent postoperative mortality and a good deal of morbidity.

Prophylactic lymph node dissection might be considered in a young patient with highly undifferentiated tumors. Prophylactic x-ray irradiation of the inguinal region is not advocated because small doses do no more good than no treatment, and large doses are quite dangerous as they cause slough of other tissue along with the cancerous growth. Marcial[1] found the best results in cases that were submitted to partial amputation. One would say then, why not use partial or complete amputation on all cases, of course inguinal dissection if necessary. But the psychological aspect has to be considered, especially in the younger people or in proud people. A man does not like to be desexualized. Suicide is quite a definite problem.

PROGNOSIS

The prognosis in cases without metastatic lymph nodes is very good. Ekstrom reported 101 or 90 per cent of 112 cases of carcinoma of the penis, without inguinal metastasis, well after five years, and late recurrences are infrequent. The prognosis is nothing like as good with inguinal metastasis. The cases that invade the corpora, or show perineural sheath involvement, or are undifferentiated, are more likely to have metastatic lesions. Even with inguinal metastasis, Ekstrom reported 21 of 65 cases, or 32 per cent, well after five years. Patients with local recurrence or inguinal recurrence have a poorer prognosis. Marcial[1] reported six patients who survived five years after radio therapy for a postoperative recurrence in 11 cases.

SUMMARY AND CONCLUSIONS

—Six cases of carcinoma of the penis treated in the Greenwood Leflore Hospital are presented.

—The prophylaxis of the disease is early circumcision and good hygiene.

—The proliferative lesions offer better prognosis than the ulcerative lesions.

—The prognosis is much poorer when there is inguinal node involvement.

—Irradiation may be used in early localized lesions, but surgery is best in more extensive lesions, with radical superficial and deep inguinal and ileo-inguinal dissections when there is inguinal node involvement.

—Apparent inguinal node metastasis might be due to inflammatory adenitis, due to secondary infection of the primary tumor or to persistent adenopathy from pre-existing diseases. Also, inguinal node metastasis may become evident after treatment of the primary tumor so that the treatment of metastatic lesions requires nice judgment.

★★★

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Clinicopathological Conference XLV

Conducted by the Department of Pathology
University of Mississippi School of Medicine
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In CPC XLV, Dr. Watts Webb of the Department of Surgery discusses the case of a 42-year-old white male admitted with a history of easy fatigability, dyspnea on exertion, and a chronic cough which had been present for eight months. Approximately six months prior to admission, he had experienced repeated attacks of "blackout spells," which followed severe bouts of coughing.

Other discussers are Drs. Joel Brunson, Robert Sloan, Thomas Blake, Perrin L. Berry, and J. R. Snavely.

THIS 42-YEAR-OLD WHITE MALE insurance salesman was admitted with a history of easy fatigability, dyspnea on exertion, and a chronic cough which had been present for eight months. Approximately six months prior to admission, he had experienced repeated attacks of "blackout spells," which followed severe bouts of coughing. He recalled a total of four such attacks, the last one occurring approximately four months prior to admission. Six weeks prior to admission he was hospitalized because of the dyspnea and was diagnosed as having rheumatic heart disease with mitral stenosis and atrial fibrillation and was treated with digitalis with moderate improvement. He was also started on anticoagulants because of the possibility that some of the post-tussive syncopal attacks were due to small cerebral emboli. The dyspnea on exertion continued, and the patient was referred to the University Hospital for possible cardiac surgery.

The patient stated that he had experienced repeated attacks of tonsillitis as a child and at the age of 14 had had rheumatic fever which kept him in bed for six months. After recovery from this illness, he remained asymptomatic. He served in the Army during World War II. The remainder of the past history was noncontributory.

Physical examination was that of an obese white male who was in no acute distress. He did not appear dyspneic. There was no cyanosis, clubbing, or chest deformity. The pupils were round and equal and reacted to light and accommodation. The extraocular movements were normal and the funduscopic examination was normal. The thyroid was not palpable. The jugular vein was distended at the neck. The chest was clear to percussion and auscultation. The heart was enlarged to the left anterior axillary line in the 6th intercostal space. The rhythm was grossly irregular with occasional runs of bigeminy. The first heart sound over the apex was loud and clear. A grade III blowing systolic murmur and an early and mid-diastolic rumble were heard at the apex. The second pulmonic sound was louder than the second aortic sound. The liver, spleen, and kidneys were not palpable. There was no edema of the extremities. All peripheral pulses were palpable.

The hemoglobin was 12.3 gm. with a hematocrit of 41 per cent. The white blood cell count was 8,700. Platelets were normal. A one stage prothrombin time showed 35 per cent activity, which was corrected with 10 per cent normal serum, was uncorrectable with Russel viper venom, and was interpreted as showing a Stuart factor deficiency. C-reactive proteins were negative. An EKG showed atrial fibrillation and nonspecific ST-T wave abnormalities. Chest x-ray and chest fluoroscopy were interpreted as showing enlargement of the left atrium (which displaced the barium-filled esophagus posteriorly) and prominence of the right ventricle. The pulmonary artery appeared prominent, and there was an increase in prominence of the pulmonary vascular bed. No undue pulsations were detected within the pulmonary vasculature. A calcified area was noted in the region of the mitral valve.

On the seventh hospital day the patient developed a yellowish tinge to the sclera, his serum was greenish-yellow in color, and the liver remained nonpalpable. A battery of liver function tests was conducted. Urine urobilinogen was positive 1-40 dilutions. SGOT was 20 units, serum alkaline phosphatase 6.4 units, total bilirubin 1.8 mg. per cent (direct 0.5 mg. per cent), thymol turbidity 2.5 units, cephalin flocculation 2+. The one stage prothrombin time remained at 35 per cent, and because of this he was given 50 mg. of vitamin K_1 oxide in 250 cc. of 5 per cent glucose I.V. Thirty minutes later the patient suddenly experienced a shaking chill and became cyanotic with rapid respiration and a slight hacking cough and developed fine moist rales over the left lung field posteriorly. The attack subsided after the administration of an antihistamine. A chest x-ray showed an increase in the hilar markings with mottling in the upper half of the left lung field. Eight hours later the patient suddenly developed speech difficulties with weakness and numbness of the right hand. By the following day the patient's speech was normal, and the strength had returned to the right hand.

He was considered to be an apt candidate for surgery, and on the following day a mitral commissurotomy was performed. During surgery the left atrium and pulmonary artery were found to be greatly dilated. The mitral valve would only admit the tip of the surgeon's index finger, and a moderate amount of regurgitation was present. The valve leaflets were greatly thickened and heavily calcified. A finger fracture commissurotomy was performed opening the valve leaflets. Immediately after this, the patient went into profound shock for about 30-60 seconds and then regained his normal blood pressure. The blood pressure remained stable throughout the remaining surgery. It was observed that he was slow to recover after cessation of the anesthesia. Upon recovery a right sided hemiplegia was present. An EKG showed a posterior myocardial infarct, and a chest x-ray showed an area of rounded density at the left lung base. He developed a low grade fever and was started on intravenous erythromycin. Respiration remained difficult with the production of copious amounts of tracheal secretions. The right pupil was dilated and fixed. The urine was grossly bloody. A tracheostomy was performed on the fourth postoperative day. Fluid from the left chest grew out *Staphylococcus aureus,* coagulase positive. On the sixth postoperative day a catheter was placed in the left pleural cavity and a sanguinopurulent material was aspirated. The patient was started on vancomycin intravenously. Some four hours later he suddenly went into shock and expired.

DISCUSSION

Dr. Joel Brunson: "Our case for today will be discussed by Dr. Watts Webb, Department of Surgery."

Dr. Watts Webb: "I think we have a very interesting case for today. Many things are wrong with the patient, some of which are obvious and some of which probably are very obscure if this follows the usual course of a CPC. Here is a 42-year-old man whom we know had proved rheumatic fever at age 14, being in bed six months at that time. He apparently made an uneventful recovery and had been asymptomatic for a long period of time thereafter. He served in World War II at which time he would have been in his early twenties and at that time apparently was thought to be free of disease or certainly was not thought to have active rheumatic fever or mitral disease from rheumatic fever.

"Eight months prior to admission he developed easy fatigability, dyspnea on exertion, and a chronic productive cough. In the next six months he had repeated attacks of blackout spells which followed severe bouts of coughing. He had at least four such attacks, the last one being four months prior to admission. Then more recently he had had further dyspnea and was diagnosed as having rheumatic heart disease with mitral stenosis and atrial fibrillation. Digitalis had been of some value.

"He was started on anticoagulants because of the possibility that some of the post-tussive syncopal attacks were due to small cerebral emboli. I think that's a possibility, but that it would be easier to explain them on the usual physiologic grounds of a severe bout of coughing. It's essentially a Valsalva maneuver which prevents return of blood to the chest and further decreases the cardiac output by decreasing the pulmonary pressures with less return of blood through the very tightly stenotic mitral valve and diminished output of blood to the brain. The fact that the attacks follow coughing spells seems to favor the Valsalva maneuver rather than the embolic phenomenon, although the latter may occur at the time of straining. Certainly, the possibility of embolic phenomenon cannot be ruled out, at this time, and one cannot criticize the starting of anticoagulants at this time.

"On physical examination at the time of admission to the University Hospital, his physical signs were within normal limits, blood pressure

110/70, pulse about 80, temperature was normal, and respirations were 18. He was an obese white man in no distress and did not appear dyspneic. There was no clubbing, cyanosis, or chest deformity. On admission the pupils were round and equal with no abnormal eye signs. The thyroid was not palpable, and the jugular veins were distended in the neck. I believe we can interpret this as indicative of an elevated venous pressure although one is not reported.

"The chest was completely clear with no evidence of pulmonary congestion. The heart was enlarged, as one might anticipate, out to the 6th intercostal space. The rhythm was grossly irregular with occasional runs of bigeminy suggestive of fibrillation, as was later proved by the electrocardiogram. The first heart sound was loud and clear. He had a grade III blowing systolic murmur and an early and mid-diastolic rumble at the apex suggestive of both mitral stenosis and mitral insufficiency. The second pulmonic sound was louder than the second aortic sound as one might expect in pulmonary congestion with increased pulmonary arterial pressure. No abnormal findings were present in the abdomen, and no edema was detectable at this time. All peripheral pulses were palpable.

"Blood counts were within normal limits as were the platelets. The prothrombin time showed 35 per cent activity corrected with 10 per cent normal serum, and a Stuart factor deficiency was detected. We do not know when his anticoagulants had been started or stopped. Clark Millikan, when he was here last year, reported that in the vast series of patients on out-patient anticoagulant therapy at the Mayo Clinic, virtually half of them were found to be outside the so-called therapeutic range. Certainly, if it were planned for this man to be anticoagulated, it is quite obvious that he was not. I think nearly every patient we have had for the last three weeks has had a Stuart factor deficiency. It's become the most impressive thing in all hematology—very much like the nonspecific ST changes in electrocardiography. The C-reactive proteins were negative suggesting no particular evidence of activity or streptococcal infection at the moment. The EKG which Dr. Blake will show us later showed atrial fibrillation and nonspecific ST wave abnormalities. The chest x-ray and fluoroscopy showed a large left atrium and prominence of the right ventricle much as one would expect with the diagnosis we are entertaining. The pulmonary artery was large with prominence of the pulmonary vascular bed, and a calcified area was seen in the region of the mitral valve suggesting calcification of the mitral valve itself which is fairly common in these cases.

"On the seventh hospital day the patient developed jaundice, and his bilirubin at that time rose to 1.8 mg. per cent, primarily indirect. The liver function tests were essentially within normal limits with a slight elevation of alkaline phosphatase. The urine urobilinogen was positive 1-40 suggesting that there was not an extrahepatic obstructive lesion.

"The one stage prothrombin time remained at 35 per cent, and he received some 50 mg. of vitamin K oxide in 250 cc. of 5 per cent glucose intravenously given slowly and cautiously. Thirty minutes later (I don't know if this was after the start or completion of the infusion) the patient suddenly experienced a shaking chill and became cyanotic, with rapid respiration, cough, and moist rales. Some people do have an anaphylactoid reaction to vitamin K_1 given intravenously, though usually this occurs when it's given more rapidly with higher dosages. It may produce flushing, weakness, a feeling of heaviness in the chest, cutaneous mottling and whelps and usually does respond as here to antihistaminics. Whether this was an anaphylactoid reaction or a febrile reaction to something in the tubing, we don't know. Possibly he had a pulmonary embolus at this time, although I doubt that. I think it was much more likely that it was a reaction to the infusion. It is not surprising that a man on the verge of failure should demonstrate rales within the lungs and increased congestion. The attack did subside and chest x-ray at this time showed an increase in the hilar markings with mottling in the upper half of the left lung. Eight hours later there was a cerebral vascular accident of some sort—probably embolic—with transient weakness and numbness of the right hand.

SURGICAL FINDINGS

"The next day he was considered to be an 'apt candidate for surgery.' I might comment on that just a moment. Here is a man who has had a CVA, a probable pulmonary embolus, he has a known bleeding tendency, he is fibrillating, he has a grossly enlarged heart, he has a definite element of mitral insufficiency, and he is obese. I am sure that this is one of those quotes that was never made. No surgeon in his right mind would consider this man an 'apt' candidate for surgery. He might have considered that this man had one chance for any prolonged survival and that was surgery, but this is the kind of case one would love to refer to his competitor. The patient did come to

surgery as apparently all considered that this was the proper thing to do under the circumstances, and a mitral commissurotomy was performed.

"During surgery the atrium and pulmonary artery were greatly dilated as anticipated, and the mitral valve would only admit the tip of the surgeon's index finger. A moderate amount of regurgitation was present. As you know from Gorlin's formulation and calculations and from observations at surgery and at postmortem examination, it is usually not until the mitral valve is reduced in area to 0.5 of a square cm. that these patients get into a great deal of difficulty from inability to pump enough blood through the stenotic valve. Now if you calculate that out, it's a diameter of 7 mm., which is an extremely tiny valve. It is amazing how they compensate so well for so long.

"The valve leaflets were thickened and heavily calcified, and a finger fracture commissurotomy was performed opening the valve leaflets. Immediately after this the patient went into profound shock for about 30 to 60 seconds but regained his normal blood pressure, and the blood pressure remained stable throughout the remaining surgery. Shock at this particular time is not terribly unusual. I don't know if it should be classified as real shock. Certainly the blood pressure may disappear and heart action usually gets irregular. During this period of finger fracture there is obstruction to the small amount of blood flow that is going through, and it is not at all unusual to have irregular heart action, marked slowing, and even temporary arrest during this particular period. I am sure that is what happened at this time. It well may have some importance so far as his later course is concerned. I think it might be a good time to see the x-rays and EKG's."

X-RAY DATA

Dr. Robert Sloan: "A routine PA of the chest taken Jan. 5 shows some of the cardinal findings in rheumatic heart disease. In the PA projection the transverse diameter of the heart is somewhat increased, but the most striking finding is the increased soft tissue density in the area representing an enlarged left atrium. The superior vena cava and the hilar vascular markings are increased in prominence, although the peripheral vascularity is not striking in this film. Barium swallow film demonstrates quite well the enlarged left atrium indenting the esophagus. We did not feel from the x-ray views that there was any real enlargement of the left ventricle. The radiographic findings fit quite well with the clinical impression of rheumatic heart disease with prominent mitral stenosis."

Dr. Webb: "The absence of the left ventricular enlargement which Dr. Sloan has mentioned has particular significance because with any degree of mitral insufficiency one would anticipate left ventricular enlargement too. This gives confirmatory evidence that the more significant hemodynamic lesion was the stenosis rather than the regurgitation, although regurgitation was present as confirmed by the surgeon at the time of operation. Postoperatively the patient was slow to recover after anesthesia, and upon recovery a right-sided hemiplegia was present. This indicates a left-sided lesion, probably of the middle cerebral region as he had fixed, dilated pupils.

"The question comes up at this time—has he had an embolus or a thrombosis. He has had a period of shock or hypotension lasting about 30 to 60 seconds. This in general is not enough to account for a thrombosis. We usually think of a period of hypotension as being extremely prone to precipitate a thrombosis either in marked narrowing of the coronaries, narrowing of the cerebral vessels or peripheral vessels. Thirty to sixty seconds of hypotension is not likely to cause such. One would think an embolus might be more likely. He also had evidence from the electrocardiogram of a posterior myocardial infarct, he was noted to have grossly bloody urine, and he had further areas of density in the left lung base. All of these could be embolic. We are not told whether a clot was found in the left atrial appendage. Very often it is and if so, it's an important source of embolism to any of the sites that have occurred here except the pulmonary embolus which would come from the right side. The other thing that one would be concerned about with a calcific mitral valve is that with fracture, particles of calcium would be released to go to the brain, to the coronaries, or peripherally to the renal parenchyma. Suppose we have the electrocardiogram interpretation at this time."

Dr. Thomas Blake: "The protocol made the statement that it was a myocardial infarct. This is the first tracing made on admission and is described as showing atrial fibrillation and nonspecific T wave changes which is just exactly what it does show. Dr. Webb referred to the absence of left ventricular enlargement on the x-ray study as evidence against there being a hemodynamic lesion which overworked the left ventricle. The fact that the right ventricle is not unduly prominent on the electrocardiograms is interesting in this problem also. Since we know from the findings described in the protocol that there was good reason for it to be enlarged, i.e. mitral obstruction, one won-

ders whether the fact that the right ventricle doesn't show up might be taken as oblique evidence that the left ventricle is enlarged. This wouldn't have been a very helpful observation at the time, however.

"With this as a control, the next tracing was referred to as showing a posterior myocardial infarct, but it wasn't reported that way. It was reported as showing posterior myocardial injury. The cardinal change is tremendous ST segment elevation that is positive from below and negative from anterior leads and is perfectly characteristic of injury to the diaphragmatic aspect of the myocardium. The absence of clear changes in the initial part of the QRS complex in leads 2, 3, and aVf prevents electrocardiographic diagnosis of infarction. Had I seen a patient of this sort at a time like this I suspect that I would have interpreted these changes as very strong evidence supporting my clinical impression that he had had a myocardial infarct. I think that they can be interpreted that way here, but the electrocardiogram does not support the diagnosis of myocardial infarct. I interpret the series as supportive of the clinical diagnosis of a recent posterior myocardial infarct, but it does not prove it unequivocally."

Dr. Webb: "How do you explain this very rapid reversion toward normal?"

Dr. Blake: "The first tracing was the very marked ST segment changes probably made very shortly after the onset of the injury."

DISCUSSER'S DIAGNOSIS

Dr. Webb: "In addition to having the tracheostomy performed on the fourth postoperative day because of copious amounts of tracheal secretions, he also developed fluid in the left chest which was positive for *staph. aureus* organisms. The patient was started on intravenous vancomycin and then some four hours later he suddenly went into shock and expired.

"There is a lot of this picture that is perfectly clear, and there is a lot of it that is obscure. Some parts of the diagnosis are relatively certain in that he has had rheumatic fever with mitral stenosis, insufficiency, and auricular fibrillation. He has been on anticoagulants, and he has had embolization, particularly postoperatively. In regard to the cough that is mentioned, mitral stenosis itself is enough to account for this and the mucoid secretions. There is no evidence here to suggest that the man has bronchogenic carcinoma or some other neoplasm that might play any role in this situation. He might have had an acid fast lesion or tuberculosis to account for the left upper lobe lesion. Coming on this rapidly, it almost certainly is not, and mitral stenosis classically gives protection from tuberculosis. The nonobstructive jaundice would lead one to think primarily of a pulmonary embolus or hemolysis with no evidence really of liver dysfunction. Postoperatively, we know he had a right hemiplegia and a coronary, along with bloody urine and something out in the lungs—all of which very well might be embolic in nature. With the bloody urine, one would have to think of the possibility of a renal neoplasm that could be metastasizing to the lungs and leading perhaps to his death.

"In the death of this particular individual I find it hard to get enthusiastic about something new and acute happening when four hours later he suddenly went into shock and expired. Again one has to think of a massive pulmonary embolism, an extension of his coronary, a massive CVA, or a marked arythmia due to the presence of coronary ischemia. Whether having had a coronary, he could rupture the myocardium six days later seems unlikely as it would be most unusual for such to occur that early. Could he have opened up the suture line on the left atrium and bled massively at that time? It could happen, but again it's not likely. Septicemia from staphylococcal infections certainly could play a role.

"In analyzing the situation, it seems to me that here is a fellow that just had more than he could cope with. We were given the idea that he was doing fairly well and yet he had hemiplegia, hematuria, hemopyothorax, coronary and pulmonary embolism, pneumonia, and probably staphylococcal septicemia. A multiplicity of things overwhelmed him at the last minute rather than anything new. So, in summary, I think there is no doubt that he had mitral stenosis and mitral insufficiency. He probably threw off calcified plaques into the middle cerebral circulation on the left, into the coronary circulation posteriorly, almost certainly into the renal parenchyma, and into the lungs resulting in postoperative empyema."

Dr. Brunson: "Thank you, Dr. Webb. This case which Dr. Webb has very adroitly discussed is reasonably straightforward. It does have certain interesting aspects, and we will discuss these as we go along. Dr. Berry will present the gross findings."

AUTOPSY FINDINGS

Dr. Perrin L. Berry: "On opening the pleural cavity a minimum amount of dark, bloody fluid was present in each cavity. A reddish-brown fibrinous exudate covered the entire pleural surfaces, and this adhered the pleura to the pericardium and to the anterior mediastinum. The pericardium was also covered with this thick exudate

and was adherent to the adjacent structures. On incising the pericardial cavity a minimal amount, only 50 cc., of a dark brown fluid was present and the reddish-brown fibrinous exudate covered the entire visceral surface of the pericardium.

"The heart appeared moderately enlarged in outline. It weighed 660 gm. A pale area measuring 1.75 cm. was located over the arterior lateral wall of the left ventricle, and a similar area measuring 1 cm. in diameter was noted on the posterior wall of the right ventricle. On cut section both these areas showed a pale myocardium which was surrounded by a hemorrhage. The right and left atrium both appeared to be moderately dilated, and the surgical incision with black silk sutures was noted in the left atrium. The suture line appeared well closed. There was hypertrophy of both ventricles, the right measuring 0.7 cm. in thickness and the left 1.4 cm. On examining the mitral valve, hard, roughened, yellow, and gritty material which was well calcified covered the entire valve surface (see Figure 1). There were no areas of inflammation, and the calcification could only be broken with difficulty. The valve ring measured 9.5 cm. in circumference. The remaining valves appeared normal and their measurements were within normal limits.

"The right lung weighed 900 gm. and the left 620, a marked increase in weight. The anterior surfaces of both lungs were pink-grey, with the color changing over the posterior and diaphragmatic surfaces to that of a reddish-purple. These dark areas were rubbery and non-crepitant on palpation, and on cut section they exuded copious amounts of dark bloody fluid. Sections through these areas sank in formalin. The bronchi were filled with a bloody, tenacious mucus, and the mucosal surfaces were hyperemic.

"The liver weighed 1,150 gm., slightly smaller than normal, and appeared somewhat congested. The spleen was enlarged and weighed 425 gm. The cut surface was of a very dark red color. The pulp was mushy and scraped off easily on the knife blade. The right kidney weighed 260 gm. and the left 275. Both appeared to be somewhat enlarged. Multiple hemorrhagic areas measuring from 1 to 8 mm. in diameter were noted over the surface of the right kidney, and on cut section, these were seen to have a pale necrotic center. On the left kidney, a single such area was noted. The capsules stripped with ease, leaving a smooth cortex. On cut section the cortico-medullary junctions were distinct and the cortical striations were undisturbed. The pelves were not dilated and the mucosa was not significantly altered. On examining the brain, the major abnormality was found over the midportion of the left parietal area in which there was a 3 x 4 cm. area of softening."

PATHOLOGIST'S REPORT

Dr. Brunson: "We have no morphologic explanation for this man's jaundice unless it be the fact that he was bleeding rather extensively into his lungs and had hemolysis and absorption. The liver showed a reasonably mild degree of passive congestion. It is not the type that one would associate with a jaundiced patient, at any rate.

"The lungs are of some interest, though. Most of the alveoli were filled with either blood or with inflammatory cells. In a good many areas, particularly in the upper left lobe, these areas were associated with destruction of the septa, and a marked accumulation of polymorphonuclear leukocytes. The same lesion is present in other portions of the lung, particularly the lower left lobe. These represent pulmonary abscesses. The pulmonary vessels by and large are open, and one would think that these lesions probably represent true formation of abscesses, rather than septic embolization. There are numerous clumps of micro-organisms lying in and around the centers of these abscesses.

"Dr. Berry described the areas in the myocardium, and these are associated with coronary occlusion and represent areas of infarction. The sections from the patient's mitral valve show evidence of previous rheumatic activity. There is very little cellular activity, and yet by gram stain there are fairly numerous organisms scattered through the calcified areas. The calcification by and large does not extend down into the substance of the valve, being almost entirely along the surface of

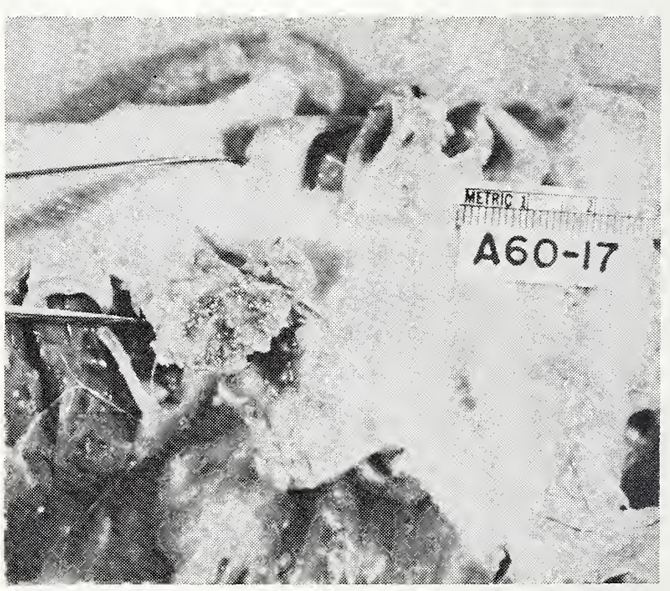


Figure 1

the valve lesions. This is the type of localization one associates predominantly with bacterial endocarditis rather than with a straightforward rheumatic calcific stenosis. The evidence would indicate that this man, at least at the time of death, had bacterial endocarditis. Whether he had this prior to surgery is a mute point, and I think we have no way of proving that.

"There is very little cellular reaction to the calcium or to the bacteria which are present. There is little evidence of coronary atherosclerosis, but lying in the lumen of several of the intramural coronary arteries there are clumps of thrombotic material and darker staining material which represent flecks of calcium. These undoubtedly have come from the valvular lesion, and these occluded vessels are associated with myocardial infarcts. Despite Dr. Blake's reluctance to diagnose a myocardial infarction, there was both gross and microscopic evidence of this occurrence. These numerous small vessels, which appear to be occluded by emboli, are associated with areas of necrosis which appear to be of varied ages, suggesting that embolization had been occurring over repeated intervals.

"Other sections from the myocardium, taken from the fairly large gross area of necrosis, show this to be apparently of fairly recent origin because of the fact that there is considerable hemorrhage around the periphery of the lesion. The muscle has become more distinctly acidophilic in its staining reaction, many of the nuclei have undergone pyknosis and shrinkage, and in other areas there are many inflammatory cells. This represents an infarct that probably is in the neighborhood of about 48 hours old, perhaps a little bit older. So there is very good evidence of recent myocardial infarction, probably on the basis of coronary embolism.

"Sections from the brain all show somewhat the same pattern, one manifested by numerous hemorrhages of all shapes, sizes, and descriptions, apparently of varied ages associated with occlusion of small vessels and with destruction of the parenchyma of the brain. Now most of these one could say probably are of reasonably recent origin, and I would think that probably Dr. Webb is right that his first episodes of syncope were not due to emboli but probably were due to decreased blood flow. Many of the small vessels in the substance of the brain are also occluded by hyaline thrombotic material. There are occasional flecks of calcium in some of these, indicating that these also were derived from the lesion on the mitral valve.

SUMMARY

"Our summary of this case would be that it represents a reasonably mild type of rheumatic activity, with probably a superimposed bacterial endocarditis with rupture of a calcific plaque and embolization of this material to the brain, to coronary arteries, and also to the kidneys. The kidneys also show some minimal proliferation in the glomerular capillaries and occlusion of scattered glomerular capillaries by hyaline thrombi, the type of lesion which is associated with bacterial endocarditis in about 50 per cent of cases, the so-called focal or thrombotic glomerulo-nephritis."

Dr. Blake: "I wasn't reluctant to diagnose the infarct. I just said the electrocardiogram didn't prove it."

Dr. Brunson: "Well, that's always the case."

Dr. Blake: "No, sometimes the electrocardiogram proves it."

Dr. J. R. Snavely: "I would just like to say this is one more time that the absence of fever causes you not to think of bacterial endocarditis. We have had at least two other examples at these exercises in the last two years of patients with almost no fever."

Dr. Brunson: "One is impressed really by the lack of inflammatory reaction in and around some of these lesions which obviously contained bacteria. The spleen microscopically also showed infarction and the type of change that would go along with bacterial endocarditis, subacute splenitis. Are there any additional comments or questions? Thank you, Dr. Webb." ★★★

2500 North State St.

EXTRA SPECIAL DELIVERY

Several months ago a British rocket containing special recording equipment was shot into outer space from a test range in Australia. The rocket was recovered with the vital data for Britain's Space Program intact and sent by air to London, then Special Delivery by train to Cheshire, 130 miles away, where scientists awaited for it with bated breath. At last report, their breath was still bated. The vital rocket was last heard of, according to a British Railways spokesman, "somewhere near Leeds."



The President Speaking

'Voluntary Health Agencies'

JOHN G. ARCHER, M.D.
Greenville, Mississippi

THE VOLUNTARY HEALTH AGENCY is a peculiarly native American institution, firmly and permanently established in our way of life. From a beginning of man's concern for another suffering a given disease condition, these organizations have grown to become powerful forces in the health care field. They deal in enormous sums of money; they sponsor enactment of legislation; they underwrite vast programs of research, education, and patient care. Their influence is extensive, reaching into many aspects of life, business, education, and medicine.

Many of these organizations have achieved notable successes, making substantial contributions to better health and longevity. Most are good stewards of the funds they solicit, rendering a public accounting of how these resources are expended and what benefit was derived from the expenditures.

Often, questions arise with regard to relations between these agencies and the profession of medicine. On occasion, there have been controversies and acrimonious disputes. The AMA and most state medical associations, anxious to create a climate of propriety and integrity between physicians and these organizations, have established committees and special bodies to study the circumstances of such relationships and to suggest guides to help achieve this climate.

For many years, the Mississippi State Medical Association has offered a means by which voluntary health agencies may apply for and secure the approval of the profession in the state. The Council on Medical Service is charged with the responsibility of examining these applications, studying the objectives, structure, and policies of the applicant agency, and making recommendations to the House of Delegates for decision. Through this procedure, many agencies have received the association's approval.

At the 95th Annual Session, the delegates directed the council to review all such programs annually. The action underscores the association's concern in this connection and the significance of the voluntary health agency movement to physicians. ★★★

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EDITORIALS

Legal Aspects of Membership: For the Benefit of the Many

I

MEDICAL ASSOCIATION MEMBERSHIP, for an overwhelming majority of American physicians, is just as much a part of their profession as owning a stethoscope and being addressed as "doctor." But since few ever have occasion to consider the legal implications of this privileged status, its roots in statutory and case law may not always be appreciated or understood. Formal relationship with one's peers within a professional organization hardly seems to be a matter of moment to law-making bodies and the courts. But the fact is that the history of medical organization in the United States is crisscrossed by judicial decree and state and federal law.

By far, legal tests and interpretations of medical association membership have been associated with "official" medical organization. By this is meant the trilevel structure of the local component society, the state association, and AMA. Of course, there are countless dozens of other medical organizations of vast influence and importance, those with interests relating to medical specialties and others with limited purposes. Ordinarily, however, all such groups stand before law as voluntary, general membership organization.

Voluntarism in medical association membership is predicated on the near-universal premise that election to its ranks is a privilege and not a right. This concept has not only been held valid by the courts with few significant exceptions, but it is also usually stated in the constitutions and by-laws of such bodies. Thus, a medical society is the judge of its own membership and may accept or reject applicants according to its own rules.

II

Most legal authorities agree that a constitution and by-laws constitute a binding agreement among the members who have adopted them or subsequently agreed to them. An applicant for membership is presumed to possess knowledge of the constitution and by-laws and is bound by them. And the contents of such documents are the business of the society so long as they are not immoral, unreasonable, opposed to public policy, and contrary to law.

Liberal court decisions, social revolution, and upheaval in established institutions raise questions as to just how inviolate the rights in selecting members of voluntary organizations may now be. Two historic bases uphold these rights: first, the privilege-not-right concept and second, the firmly established legal precedent that the courts do not interfere with the internal affairs of a voluntary organization unless fraud exists or there is a lack of jurisdiction.

Customarily, the courts refuse to consider a cause of a member until he has exhausted all remedies available to him under the constitution and by-laws of the association with which he is at controversy.

III

There are two widely accepted legal theories as to what membership in a medical association

actually constitutes. One is the contract theory and the other, the property theory. The first holds that members of a medical organization have entered into a contract with one another and that the terms of the contract are expressed in the constitution and by-laws. They are thus obligated to observe the requirements thereby placed upon them.

The property theory of membership holds that each member has a property interest in the association, such as real estate, medical libraries, or even in the corporate charter. If this is the case, the courts may intervene to protect a member against the loss of such right.

In recent years, litigation relating to medical association membership has been largely over exclusion or the denial of membership to an applicant. Generally, the courts have upheld the prerogative of the association to be the judge of its own members, but some decisions have required admission of the plaintiff physician. Usually, these decisions have resulted from a secondary exclusion from hospital staff membership or restraints beyond the purview of the medical society's jurisdiction. In a few cases, the courts questioned whether a county medical society was, indeed, a voluntary organization. The most universally defensible position for the society to assume is the equal and exactly identical application of its rules to all.

IV

The position of an individual already admitted to membership and expelled therefrom differs greatly from one whose application for election is denied. Under the property theory, the courts could require proof of a severable property interest by the member who has been expelled. Under the contract theory, mere violation of the constitution and by-laws could be a sufficient basis. In either event, the procedure which the medical association must follow in expelling a member is the same. Its actions must be of a quasi-judicial nature, the constitution and by-laws followed, and the rights of the accused fully upheld. In such procedures, the courts would be cognizant only to the extent of procedure, fair hearing, and whether the expulsion proceeding violated the law. On many occasions, the courts have upheld the right of a medical society to expell a member for violation of ethical principles.

By and large, the integrity of official medical organization has been sustained in questions of membership before the courts. With few exceptions which usually related to medical care plans and financial arrangements associated with them, judicial decisions uphold the right of medical societies to choose whom they will have as members and the circumstances under which membership status is continued.

This sums up as a highly favorable commentary upon the objectives and aims of physicians and upon the manner in which they have chosen to associate themselves together professionally and ethically. The safeguards are for the benefit of the many, not the advantage of the few. Most doctors of medicine will agree that there is no higher warranty upon a practitioner's qualification and moral integrity than that of being numbered among the members of his professional association.—R.B.K.

The FTC's Aspirin Headache

Aspirin is almost a dirty word in the precincts of the Federal Trade Commission. And if not that, it is at least a causative factor in a governmental headache. It all got started when FTC began to scrutinize the headache pill ads directed to the public assuring all sorts of fast relief, no upset stomachs, and a mild, kindly disposition toward one's mother-in-law. To find out if the aspirin pitch was deceptive, the FTC organized a group of physician-researchers to study the five biggest selling brands which included aspirin, the "combination of ingredients" tablets, and those boasting buffering agents.

When the investigators published their findings in the *Journal of the American Medical Association,* the course of events took on a bizarre twist. One brand of aspirin, given a slight edge over its competition in the report, hit the airwaves, newspapers, and popular magazines with a new zeal to relieve the nation's headaches. The truth-in-advertising regulatory agency, which had started the whole business, forthwith went into the federal courts, seeking to enjoin the maker against further ads using the *JAMA* study as a sales pitch.

The district court decided that the aspirin ads weren't deceptive, so FTC appealed to a higher tribunal only to become a two-time loser. In fact, the government agency was told that if the expert report were accurate, then the public has a perfect right to know about it. On the other hand, the judicial opinion continued, if it were false, then FTC had a hand itself in fostering false advertising.

If this incredible trend of events has a moral, it is obviously a case of fumbling on the part of

nearly every ball carrier. And it is also evident that the government moves in strange and mysterious ways.—R.B.K.

The Dental Specialties

The explosion of health education information in the popular mass media has removed the once prevalent mystery and puzzlement from the medical specialties. Nearly everybody knows generally what a pediatrician or a dermatologist does. But less understanding is found about the dental specialties which are highly developed and contributing mightily to making Americans healthier.

The American Medical Association recognizes 33 medical specialties including general medicine —at the last count, that is. The American Dental Association categorizes dentistry into eight categories including general dentistry. The chances are that most people can't name half of them.

In addition to the generalist or family dentist, there are the oral surgeons whose work includes exodontia, procedures involving excision and repair, and the treatment of fractures of the jaws. The orthodontists, who make up the largest single dental specialty, diagnose and treat irregularities in tooth position and jaw relationship, while the pedodontists limit their work to the treatment of children. Periodontists treat the gums and associated tissues and prosthodontists are concerned exclusively with dental prostheses.

Least known among the dental specialists are the oral pathologists and public health dentists. For the seven specialty areas, there are rigorous postgraduate training minimums, and certification also requires practice experience.

As one of the three scientific practitioners with the physician and veterinarian, the dentist deserves the plaudits he is receiving for advancing the whole of the health sciences.—R.B.K.



"You can't transfuse him with my blood, we're incompatible."

PERSONALS

RAYMOND F. GRENFELL of Jackson has received a certificate of Fellowship in the American College of Chest Physicians. The College is an International Society with nearly 8,000 members in 89 countries and territories throughout the world.

CARL E. LEWIS and WILLIAM L. CROUCH of Jackson have announced the association of CHESTER H. LAKE in the practice of obstetrics and gynecology.

HENRY P. MILLS, JR., is now practicing ophthalmology in Jackson. He is associated with STIRLING S. MCNAIR and FRANCIS E. MCCULLOUGH. A 1957 graduate of the University of Mississippi School of Medicine, Dr. Mills interned at Orange Memorial Hospital in Orlando, Fla. He served as a flight surgeon in the USAF stationed at Eglin Air Force Base, Fla. and completed his residency at Baylor University in Houston, Texas.

LAWRENCE MOFFITT has opened his practice in obstetrics and gynecology in Corinth. A graduate of the University of Tennessee at Memphis, Dr. Moffitt interned at Methodist Hospital in Memphis and the Medical College of Virginia in Richmond. He took his residency at St. Joseph's Hospital in Memphis and St. Thomas' Hospital in Richmond.

THOMAS PURSER, JR., who is associated with the Veterans Administration Hospital in Jackson, has been elected to the Board of Directors of the Mississippi Chapter, Arthritis and Rheumatism Foundation.

JAMES L. THORNTON has announced that he will open his office in New Albany for the general practice of medicine. A graduate of the University of Mississippi School of Medicine, Dr. Thornton interned at John Gaston Hospital in Memphis. He has been serving in the Navy Medical Corps for the past three years and currently holds the rank of lieutenant, senior grade.

THOMAS B. WHITEHEAD has closed his practice in Ellisville to begin a residency in urology at the University of Mississippi School of Medicine in Jackson. Dr. Whitehead has been practicing in Ellisville for the past four and one half years.

State Morbidity Reported Through Sept. 6

The Mississippi State Board of Health reports the following occurrence of morbidity for 1963 through the 36th week of the year, ending Sept. 6, 1963. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	559
Tuberculosis, O.F.	26
Typhoid Fever	3
Encephalitis, infectious	13
Salmonella infections	13
Dysentery	
Bacillary	55
Amebic	8
Dysentery, NOS	1
Food Poisoning, NOS	21
Diarrhea of Newborn	5
Septicemia, Staph.	47
Septicemia, NOS	9
Septicemia of Newborn	3
Meningococcus infection	
Meningitis	20
Meningococcemia	2
Meningitis, O.F.	52
Gas Gangrene	1
Bac. Diseases, other	1
Poliomyelitis	3
Tularemia	2
Mononucleosis, infectious	88
Malaria, Vivax	1
Other Cestode Infest. (HN)	1
Hepatitis, infectious	473
Adenovirus (ARD)	3
Rocky Mt. Spotted Fever	1
Helminthic infections	
Hookworm	955
Ascariasis	317
Strongyloides	47
Cryptococcosis	1
Myelitis	2
Sporotrichosis	1
Generalized Vaccinia	1
Rheumatic fever	3
Rheumatic heart	5
Histoplasmosis	7
Streptococcus infections	
Scarlet fever	210
Strep throat	2,005
Other inf. and parasitic diseases	1
Pertussis	76
Measles	708
Chickenpox	927
Tetanus	1
Mumps	618
Other complications of smallpox vaccination	3
Influenza	32,143
Gonorrhea	3,647
Syphilis	
Early	301
Late	109

Saunders Announces Recent Publications

W. B. Saunders Company features the following new books and new editions in their full page advertisement appearing elsewhere in this issue:

CURRENT PEDIATRIC THERAPY—Edited by Gellis and Kagan

This new book gives you the best treatments, currently in use by leading authorities, for over 300 diseases and disorders that afflict children.

MAINLAND—ELEMENTARY MEDICAL STATISTICS

A New (2nd) Edition—revised to bolster your statistical thinking and also your use of the standard statistical formulas and procedures.



The following physician has been elected to membership by his respective component medical society in the Mississippi State Medical Association and the American Medical Association:

LEWIS, WILEY DAVIDSON, Meridian. Born Woodland, Miss., Feb. 6, 1908; M.D., University of Tennessee College of Medicine, Memphis, 1931; interned Baptist Memorial Hospital, Memphis, Tenn., one year; member, American Psychiatric Association; certified by the American Board of Psychiatry and Neurology; elected Aug. 6, 1963, by East Mississippi Medical Society.

Book Reviews

Surgical Practice of the Lahey Clinic. By members of the Staff of the Lahey Clinic, Boston. 872 pages. Philadelphia: W. B. Saunders Company, 1962. $17.00.

This is the third volume in as many decades that the Lahey Clinic Surgeons have compiled in an effort to record their combined experiences with a variety of surgical problems.

The volume will primarily appeal to the general and the thoracic surgeon. There are well-documented sections on head and neck; breast; esophagus, chest and abdominothoracic surgery; stomach and duodenum; small intestine, colon, sigmoid, and rectum; biliary tract; pancreas, adrenal gland and spleen. In addition, the surgical subspecialties are covered under the headings of brain and spinal cord; pelvis; genitourinary tract; and bones and joints. The book particularly reflects the Lahey Clinic's large experience with thyroid surgery, gastrointestinal surgery, and problems of the biliary tract and pancreas.

Although many of the articles in the volume appear in print for the first time, the majority of them are revisions or reprints of papers that have appeared in the past few years in the leading surgical journals. In my opinion, this does not detract from the value of the book.

The book deals almost entirely with actual clinical experiences, with very little reference to experimental work. Surgical techniques are very clearly explained and well illustrated. The operative techniques described are those preferred and used by the clinic surgeons, indeed they are procedures that have been standardized and proven through the years.

This book is not a textbook of surgery nor an elaborate review of the literature. It is a summary of experiences of practicing surgeons, telling of their indications, techniques, complications, and results which they have obtained in dealing with a large number of varied surgical problems. In referring to the methods and opinions put forth in the second edition of this volume, the late Dr. Frank H. Lahey stated in the preface to the second edition, "They are what we have found to be the best for us and have the real value of having been arrived at as the result of our own not inconsiderable experiences." The fact that their experiences are "not inconsiderable" makes this book a valuable addition to the library of every general surgeon.

CARL D. BRANNAN, M.D.

Clinical Diagnosis by Laboratory Means, ed. 13. Edited by Israel Davidsohn, M.D., and Benjamin B. Wells, M.D. 1020 pages. Philadelphia: W. B. Saunders Company, 1962. $16.50.

Drs. Davidsohn and Wells, and 16 other authorities in the broad field of laboratory medicine have more than succeeded in revising the old and familiar "Todd and Sanford." They have created a new and authoritative book of great value. This book, in the few months since its publication, has become the standard against which other clinical pathology books are measured.

In its 26 chapters and valuable appendix is the latest and most complete information available to physicians desiring to make full use of modern laboratory diagnostic methods. Naturally, no single book can completely cover this ever expanding field, but this book goes a long way toward this ideal.

Many new areas of applied knowledge are covered, including serum enzyme tests, radioisotope tests, hemorrhagic disorders, microchemical pediatric methods, viral diseases, and there is an excellent chapter on water and electrolytes.

Among the few criticisms that this reviewer can make is the inclusion on page 102 of the Wintrobe correction chart for the erythrocyte sedimentation test, which Dr. Wintrobe has himself now abandoned. A typographic error is present on page 547. In preparing the Diazo Reagent, Solution B, sodium nitrite rather than nitrate should be used.

The chapter "Blood Groups and Their Application," written by Dr. Kurt Stern, is especially valuable because of its clarity and important clinical applications. The field of blood banking and immunohematology is very confusing, and its basic concepts are difficult to grasp. The chapters on this subject are very valuable.

While this book will be most useful to internists, pediatricians, pathologists, laboratory technical workers, and medical students, it can be recommended for any physician.

LEO J. SCANLON, JR., M.D.

ORGANIZATION / Continued

Strabismus: Symposium of the New Orleans Academy of Ophthalmology. By Raynold N. Berke, M.D., assistant clinical professor of ophthalmology, Columbia University; John Woodworth Henderson, M.D., professor of ophthalmology, University of Michigan; Harold Whaley Brown, M.D., clinical professor of ophthalmology, New York University Post-Graduate Medical School; Arthur Jampolsky, M.D., Director, Eye Research Institute, Presbyterian Medical Center, San Francisco, California; David G. Cogan, M.D., professor of ophthalmology, Harvard Medical School; Marshall M. Parks, M.D., attending ophthalmologist, Children's Hospital, Washington, D. C. Edited by George M. Haik, M.D., professor of ophthalmology, Louisiana State University. 369 pages. St. Louis: C. V. Mosby Company, 1962: $18.00.

This is the second symposium on strabismus presented by the New Orleans Academy of Ophthalmology. The panel of discussants are all ophthalmologists of authority in their special fields. The problems of strabismus are approached from the standpoint of neuroanatomy and neurophysiology rather than on a pure anatomic basis. Marshall Parks presents the diagnosis and treatment of concomitant esotropia and exotropia in children. John W. Henderson relates the neuroanatomy of ocular motility and the neurology of amblyopia. Nystagmus is classified and discussed by David Cogan.

Arthur Jampolsky presents his views on the management of small-degree eso and exo deviations with special attention to A.V. syndromes. Raynold Berke gives the principles and techniques of horizontal and vertical muscle surgery. Harold W. Brown discusses diagnostic procedures, surgical management, results and complications of strabismus surgery.

The final 57 pages are devoted to roundtable discussions by the panel of questions presented from the audience. This is often the most interesting part of any symposium, and this one is no exception. Differences of opinion and the reasoning behind the differences of opinion are better revealed in this manner than in formal presentation.

This edition is competently edited by Dr. George Haik and reveals a consensus of opinion on the subject of strabismus in the year of 1962. This book is a valuable edition to the library of the practicing ophthalmologist.

FRANCIS E. MCCULLOUGH, M.D.



Copyright 1963, Mississippi State Medical Association

"By the way, did the TV work any better with the taller antenna?"

UMC Announces Visiting Professors Program

A pilot program of visiting professors of medicine has begun in the Department of Medicine at the University of Mississippi Medical Center, Jackson.

Announced by Dr. J. Robert Snavely, professor and chairman, the series started in September with a weeklong participation in departmental activities by Dr. Eric Snell, Maye Reader in Medicine at Oxford.

A minimum of four visiting professors, each to spend a full week in the department, is scheduled for the current academic year. Each guest professor is to meet departmental conferences, round with students and house staff daily, and present Medical Grand Rounds.

The series is grant supported.

AMA Education and Research Foundation Asks Support For Medical School and Loan Programs

The American Medical Association Education and Research Foundation opened its fall campaign for contributions with a personal letter to all Mississippi physicians from AMA President Edward R. Annis.

Through national and state leaders, AMA-ERF is asking support for its two major programs, the Medical Education Loan Guarantee Program and the Funds for Medical Schools.

In his letter dated Sept. 16, Dr. Annis challenged U. S. physicians to join him in support of the 18-month-old Loan Guarantee Program. He noted that since its inception in March 1962, the program has enabled more than 8,000 medical students, interns, and residents to borrow funds to continue their training.

Dr. Annis pointed out that for each dollar in the Loan Guarantee Fund, the bank will lend 12½ dollars. "Although no one has been denied a loan because of lack of guarantee money," he said, "the Fund must be constantly enlarged to keep pace until the time when repayments will equal the demand for new loans."

According to AMA-ERF, contributors had made a total of $18,164,260 available through the Loan Guarantee Program as of June 30. Of this total, $15,213,387 had already been extended for 8,000 loans. This left a balance of $2,950,873 in credit potential, which would cover the principal and interest for about 1,600 additional loans.

Loans have averaged $1,120 in principal amount, according to AMA-ERF. The minimum that can be borrowed is $400 and the maximum is $1,500 during any academic year. Loans to residents and interns have averaged slightly higher in amount of principal than those to medical students, although in number 63 per cent of all loans have gone to medical students.

Through June 30, 1962, 198 loans had been made to medical students, interns, and residents in Mississippi involving a total of $215,000.

Under AMA-ERF's other major program, Funds for Medical Schools, Mississippi received a total of $13,068.74 for the University of Mississippi School of Medicine for 1962. Of this, $7,808.42 was earmarked for the university by AMA-ERF donors and $5,260.32 was Mississippi's share of undesignated AMA-ERF Funds.

Dr. Raymond Grenfell, chairman of the MSMA Committee on AMA-ERF, has reported that Mississippi physicians, their families and friends contributed $9,828.82 to AMA-ERF in 1962. The Woman's Auxiliary to MSMA was responsible for $1,214.32 of this total. Out of the $9,828.82, a total of $8,453.82 was marked for the Funds for Medical Schools program and a total of $1,375.00 was marked for the Loan Guarantee Program.

Physicians wishing to contribute to AMA-ERF should make their checks payable to the AMA-Education and Research Foundation, 535 North Dearborn St., Chicago 10, Ill. Contributions may be earmarked for the Loan Guarantee Program or the Funds for Medical Schools Program. If marked for the Funds for Medical Schools Program, they may be designated for a specific school or given without designation.

Papers Are Invited For '64 Meet

Officials of the Section on Medicine have invited members of the association interested in presenting papers at the 96th Annual Session to submit titles and abstracts for consideration. Dr. J. Manning Hudson of Jackson, section chairman, said that "all responses to the invitation will receive careful review by the section officers when the final program is chosen."

The Section on Medicine, one of the seven formal bodies of the Scientific Assembly, will meet on Tuesday morning, May 12, 1964. Present plans call for two out-of-state guest essayists and three MSMA-member essayists. All topics selected for the section programs should be related primarily to the medical field of interest, including the specialty of internal medicine and its subspecialties, the announcement continued.

"Interested members of the association wishing to respond to the invitation," Dr. Hudson said, "should submit their proposed titles and abstracts for review by or before December 1." He said that responses may be in letter form, addressed to the section, in care of MSMA headquarters at 735 Riverside Drive, Jackson.

The 96th Annual Session will meet during May 11-14, 1964, at Jackson. The Scientific Assembly will meet beginning with the Section on Medicine on May 12. Dr. A. B. Smith of Meridian is section secretary.

Quadruplets Born To Jackson Family

With the birth of girl quadruplets on Sept. 7, the Thomas P. Harkinses of Jackson proved that even a 1 in 700,000 chance has to happen to someone.

Born within nine minutes of each other, the baby girls weighed in at three pounds, ten ounces; three pounds, eight ounces; three pounds, three ounces, and four pounds, one ounce. Mrs. Harkins entered the hospital at 7 p.m. and the first baby was delivered at 8:53 p.m. The other babies were born at 8:57, 9, and 9:02 p.m.

As of JOURNAL MSMA press time, the quadruplets, who are fraternal, not identical, were reported by their pediatrician to be doing "quite satisfactorily."

The Harkinses are the parents of five other children, three girls and two boys, the eldest of which is six. Mr. Harkins, a Jackson food store owner, is 50, and Mrs. Harkins is 27.

As far as is known, the Harkins quadruplets are the first to be born in Mississippi and live even 24 hours. The exact incidence of quadruplet births worldwide, according to Dr. John T. Kitchings of Jackson, president of the Mississippi Ob-Gyn Society, is 1 in every 89^3 births or 1 in every 704,969 births.

Dr. Kitchings also noted that a number of factors, including age of parents, parity, heredity, and race, play a part in determining multiple births.

A check of the medical literature showed that less than 20 living sets of quadruplets have been reported in English-language publications during the past 30 years.

Dr. Gore To Head National Guard Group

Dr. Albert L. Gore, a Jackson general practitioner, was named president of the Mississippi National Guard Association during the group's annual business meeting Aug. 25.



New officers of the Mississippi National Guard Association include, left to right, Dr. Albert L. Gore, president; William A. Browne, vice president, and Thomas A. Bell, vice president.

Dr. Gore, who is commanding officer of the 213th Medical Battalion, holds the rank of lieutenant colonel. He succeeds Col. Keith Stainbrook of Vicksburg.

New vice presidents of the association are Maj. William A. Brown, a pilot with the 183rd Aeromedical Transport Squadron, and Maj. Thomas A. Bell, judge advocate of the 31st Infantry (Dixie) Division.

First Lt. John H. Stennis of Jackson, son of Senator John C. Stennis was named secretary by the national guard members. He is judge advocate of the 183rd Aeromedical Transport Squadron. The newly-elected treasurer is 1st Lt. E. O. Gardner, who is an executive officer with the 113 Military Police Company.

Lt. Col. Preston Jackson of the Third Brigade, 31st Infantry (Dixie) Division, was named delegate to the guard's national convention.

All the officers are from Jackson.

Baylor Professor To Address Nurse Anesthetist Meet

Dr. Arthur S. Keets, professor of anesthesiology at Baylor, is to be guest speaker for the annual seminar for nurse anesthetists to be held at the University Medical Center Oct. 18.

Topic for the one-day program is "Some Metabolic Aspects of Anesthesia." Dr. Leonard W. Fabian is program co-ordinator in his dual capacity as anesthesiology department chairman and member of the professional education committee of the Mississippi Heart Association which finances the seminar.

Dr. Keets will speak on hyperventilation and respiratory alkalosis in the morning and on fact and fancy in the drug therapy during the afternoon. School of Medicine speakers will be Dr. Elizabeth Dowdy, associate professor, on respiratory difficulties in the newborn; Dr. Ralph Dunn, clinical instructor, on hypoventilation and respiratory acidosis, and Dr. Fabian on measurement of respiratory gases.

Physicians are invited to encourage anesthetists in their communities to attend this session.

SMA Sets 57th Meet For Nov. 18-21

Leading physicians from all over the United States have accepted invitations to appear as special guest speakers on the program for the 57th Annual Meeting of the Southern Medical Association to be held in New Orleans, La., Nov. 18-21, 1963.

These special guest speakers and the specialty programs on which they will appear are: Dr. John M. Sheldon, Ann Arbor, Mich., Allergy; Dr. Vincent J. Collins, Chicago, Ill., Anesthesiology; Dr. Thomas B. Fitzpatrick, Weston, Mass., Dermatology; Dr. Charles F. Code, Rochester, Minn., Gastroenterology; Dr. Philip Thorek, Chicago, Ill., General Practice; Dr. Carl T. Javert, New York, N. Y., Gynecology; Dr. Frank Mason Sones, Jr., Cleveland, Ohio, Medicine; Dr. W. James Gardner, Cleveland, Ohio, Neurology and Psychiatry; Dr. F. Bayard Carter, Durham, N. C., Obstetrics; Dr. Harold F. Schuknecht, Boston, Mass., Ophthalmology and Otolaryngology; Dr. Herbert E. Pedersen, Dearborn, Mich., Orthopedic and Traumatic Surgery; Dr. Felix Wroblewski, New York, N. Y., Pathology; Dr. John Caffey, Denver, Colo., Pediatrics; Dr. Robert A. Chase, Palo Alto, Calif., Plastic and Reconstructive Surgery; Dr. Robert A. Scarborough, San Francisco, Calif., Proctology; Dr. E. B. D. Neuhauser, Boston, Mass., Radiology; Dr. Geza de Takats, Chicago, Ill., Surgery; and Dr. John W. Draper, New York, N. Y., Urology.

In addition to these special guests, approximately 500 more physicians will participate on the program during the four day scientific and educational meeting. Some 200 scientific and technical exhibits will form an integral part of the meeting.

Three well-planned symposia will highlight the meeting—one on organ transplantation led by Dr. Clifford C. Snyder, Miami, Fla., and featuring such experienced men in this field as Dr. Charles C. Sprague, New Orleans, La.; Dr. Charles DeWitt, New Orleans, La.; Dr. James D. Hardy, Jackson, Miss.; Dr. David M. Hume, Richmond, Va., and Dr. Thomas E. Starzl, Denver, Colo.

A second symposium on thermal modalities in medicine, arranged by Dr. Benjamin F. Byrd, Jr., Nashville, Tenn., will have the following participants: Dr. John Adriani, New Orleans, La.; Dr. N. C. Hightower, Jr., Temple, Texas; Dr. Curtis P. Artz, Jackson, Miss.; Dr. John E. Adams, San Francisco, Calif., and Dr. Arlie R. Mansberger, Jr., Baltimore, Md.

The third symposium, concerned with the relationship of enzymes and viruses to cancer, will be headed up by Dr. Murray M. Copeland, Houston, Texas, and will feature Dr. W. Ray Bryan, Bethesda, Md.; Dr. Leon Dmochowski, Houston, Texas; Dr. James T. Grace, Buffalo, N. Y.; and Dr. Felix Wroblewski, New York, N. Y.



"And remember, Doctor, 'Citoibitna' is antibiotic spelled backward."

Workshops, Refresher Courses, Round Table Luncheons, and Fireside Conferences will be some of the activities of special interest to pathologists, radiologists, and chest physicians. The Southern Medical Association will cooperate with the College of American Pathologists in holding a workshop on professional problems of the pathologist designed primarily for senior pathology residents. Radiology Refresher Courses, co-sponsored by the association and the Radiological Society of North America, will have lectures on "The Radiologic Evolution of Generalized Skeletal Dysplasias," "Juvenile Osteochondrosis," "Leukemia: Its Diverse Manifestations," and "Radiologic Aspects of Respiratory Distress in Infants and Children." Round Table Luncheons and Fireside Conferences, joint presentations of the American College of Chest Physicians, Southern Chapter, and the Southern Medical Association, will feature several groups of prominent scientists discussing recent advances in the diagnosis and treatment of cardiopulmonary disease.

A full schedule of closed-circuit color television programs, under the direction of Dr. Louis Burroughs, New Orleans, La., and his committee, has been planned for the Sections on Ophthalmology and Otolaryngology, Gynecology and Obstetrics, Surgery and Pathology, Plastic and Reconstructive Surgery, Proctology, Pathology, Gastroenterology and Proctology, and Dermatology. Physicians responsible for each program are: Drs. Harold G. Tabb, Conrad G. Collins, Edward T. Krementz, Richard Vincent, Patrick H. Hanley, Emma S. Moss, W. D. Davis, Jr., and Vincent J. Derbes, all of New Orleans, La.

On the lighter side of the meeting, a golf tournament has been scheduled by Dr. Ruble E. Moor, New Orleans, La., and the entertainment features include alumni and fraternity reunions, the President's Luncheon with Dr. Edward R. Annis, Miami, Fla., president of the American Medical Association, as guest speaker, and the association's annual dinner dance. Many activities are also planned for the pleasure of the physicians' wives. The ladies will have many interesting things to do and places to visit in New Orleans while their husbands are in scientific sessions.

Saunders Names Recipients Of Writing Award

The extensive and enthusiastic response to the announcement of the Saunders 75th Anniversary Writing Fellowship has resulted in the awarding of two grants instead of the previously announced single award.

So many outstanding applications were received by the Selection Board from medical scientists of distinguished accomplishment, that an Executive Committee consisting of Robert F. Loeb, Rene J. Dubos, Henry Allen Moe, and Robert S. Morison recommended to the Saunders Company that it mark its anniversary with two equal fellowships, each in the amount of $15,000.

Saunders accepted this recommendation and announces that the two recipients chosen by the eminent selection board are Dr. Herman M. Kalckar, of Harvard Medical School, and Dr. Paul B. Beeson, of Yale University School of Medicine.

Dr. Kalckar will be writing on Biological Patterns of Cells in Developmental Defects and Disease States.

Dr. Beeson will be writing on Associations of Specific Infections with Certain Disease States of Man.

Formal presentation of the awards will be made individually to each grantee at two dinners to be held in the fall and early winter.

Ole Miss Medical Alumni Announces Open Houses

Ole Miss Medical Alumni attending the Birmingham Medical Progress Assembly Oct. 6-8 are invited to meet in the Dinkler-Tutwiler Hotel for a 5 p.m. open house on Oct. 6.

At the Southern Medical Association sessions in New Orleans, alumni gathers are set for 5:30 p.m. Nov. 18 and 19 in the Roosevelt Hotel.

Dr. William E. Lotterhos of Jackson, alumni president, will host both events.

University Names Five To Medical Faculty

Five new faculty members have been appointed to the University of Mississippi faculty. They include Dr. Milton York and Dr. Berly Bridges, assistant professors of anesthesiology; Dr. Connie McCaa, instructor in biochemistry, and Dr. Eugene Chernell and Dr. John M. West, instructors in psychiatry.

Dr. York and Dr. McCaa are graduates of the University of Mississippi School of Medicine. Dr. Bridges was graduated from the University of Texas Medical Branch in Galveston, Dr. Chernell from the New York University Bellevue Medical Center, and Dr. West from Melbourne University in Victoria, Australia.

Hahnemann College Sets Tenth Symposium

The Hahnemann Medical College and Hospital has announced that its Tenth Symposium will be conducted Nov. 18-20 at the Sheraton Hotel in Philadelphia, Pa.

Topic of the Symposium will be "Aging of the Lung: Perspectives."

The primary purpose of the symposium is to consider recent developments in the biochemistry, morphology, and physiology of aging as it relates to the lung. The formal presentations will thus serve as a basis, not only to summarize the present status, but also to delineate unsolved problems.

Further information may be secured from Dr. Leon Cander, Symposium Director, Hahnemann Medical College and Hospital, 230 North Broad St., Philadelphia 2, Pa.

Community Health Week To Be Observed Oct. 20-26

The first national observance of Community Health Week is scheduled Oct. 20-26, the American Medical Association has announced.

The AMA House of Delegates, policy-making body of the association, adopted a resolution establishing the special observance on an annual basis last November. The objective is to focus public attention on the progress of medical science in all communities and the high quality of each community's health resources and facilities.

The manner of observance will be decided by each state and county medical society. Such activities as health fairs, science fairs, immunization campaigns, and orientation of students about medical and health careers may be focal points of the week's program.

The House of Delegates suggested that the first Community Health Week be devoted to an examination of the broad spectrum of medical progress in the past few decades.

"With emphasis on local achievements and local responsibility, Community Health Week affords the medical society the opportunity to present the viewpoint that existing medical services are the fruits of the community's hard work in earlier years and that it is the responsibility of each citizen, working with his neighbors, to help plan now for tomorrow's needs," Dr. Edward R. Annis, Miami, Fla., AMA president, said. "Dramatizing this viewpoint, Community Health Week may serve as a potent catalyst for community action."

UMC Schedules 1963 Circuit Courses

Statewide Circuit Courses will resume in October, presented by the University Medical Center with the cooperation of the Mississippi State Medical Association and the Mississippi Academy of General Practice.

The series will begin Oct. 23 in the North Mississippi Community Hospital, Tupelo, at 7:30 p.m. and continue the following night with a 6:30 p.m. dinner meeting at the Travel Inn, Greenwood.

Speakers for the first session are to be Dr. Elizabeth Dowdy, associate professor of anesthesiology, resuscitation of the newborn; Dr. Julian Wiener, clinical assistant professor of surgery, prostatic obstruction, and Dr. Paul S. Derian, associate professor of orthopedics, emergency orthopedic care.

Speakers from the Departments of Medicine and Psychiatry will make the Tupelo-Greenwood presentation the following week. The series will end with four talks on pediatrics and obstetrics-gynecology.

Local chairmen for the programs are Dr. Howard Nelson, Greenwood, and Dr. Frank Tatum and Dr. Malcolm Moore in Tupelo. E. R. Squibb and Sons support the courses by a postgraduate education grant.

AMA Plans Conference On Disaster Medical Care

The Fourteenth National County Medical Societies Conference on Disaster Medical Care has been scheduled for Nov. 2-3 at the Pick-Congress Hotel in Chicago.

To be sponsored by the AMA Council on National Security, the program will have as its theme "Brass Tacks."

Further information regarding the conference may be secured from Gordon L. Fryer, Secretary, Council on National Security, American Medical Association, 535 North Dearborn St., Chicago, Ill. 60610.

DEATHS

DAVIS, ORVILLE ALEXANDER, Lyon. M.D., Memphis Hospital Medical College, Tenn., 1908; died July 29, 1963, aged 81.

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Clinical Meeting, Dec. 1-4, 1963, Portland, Ore. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn, Chicago 10, Ill.

American College of Surgeons, Oct. 28-Nov. 1, 1963, San Francisco. Samuel P. Harbison, Secretary, 40 East Erie, Chicago 11, Ill.

American Academy of General Practice, April 11-16, 1964, Atlantic City, N. J. Mr. Mac F. Cahal, Volker Blvd. at Brookside, Kansas City 12, Mo.

Southern Medical Association, Nov. 18-21, 1963, New Orleans, La. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham 5, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 11-14, 1964, Jackson. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Amite-Wilkinson Counties Medical Society, First Tuesday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday Monthly, 6:30 p.m., Robert E. Lee Hotel, Jackson. Jim G. Hendrick, 800 Carlisle St., Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday March and First Wednesday November, 2:00 p.m., Clarksdale. Whitman B. Johnson, Jr., 422 McWilliams Building, Clarksdale, Secretary.

Coast Counties Medical Society, Second Wednesday, January, First Wednesday, March, May, July, September, November. Charles N. Floyd, 1619-23rd Ave., Gulfport, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. Robert M. Graham, 612 Dixie Towers, Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March and September. Robert B. Townes, Jr., 1196 Mound St., Grenada, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. Thomas W. Wesson, 420 Magazine, Tupelo, Secretary.

North Mississippi Medical Society, First Thursday April and October, Oxford. Marcus E. Morrison, 512 Van Buren Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucien Olen Crosby Memorial Hospital, Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. James C. Bass, Jr., 424-13th Ave., Laurel, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Tom H. Mitchell, The Street Clinic, Vicksburg, Secretary.



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The tendency of the elderly to subsist on low-residue foods often is a prime cause of bowel sluggishness. Adequate fecal content is necessary to maintain normal colonic function, since intracolonic distention is nature's method of stimulating reflex peristalsis.

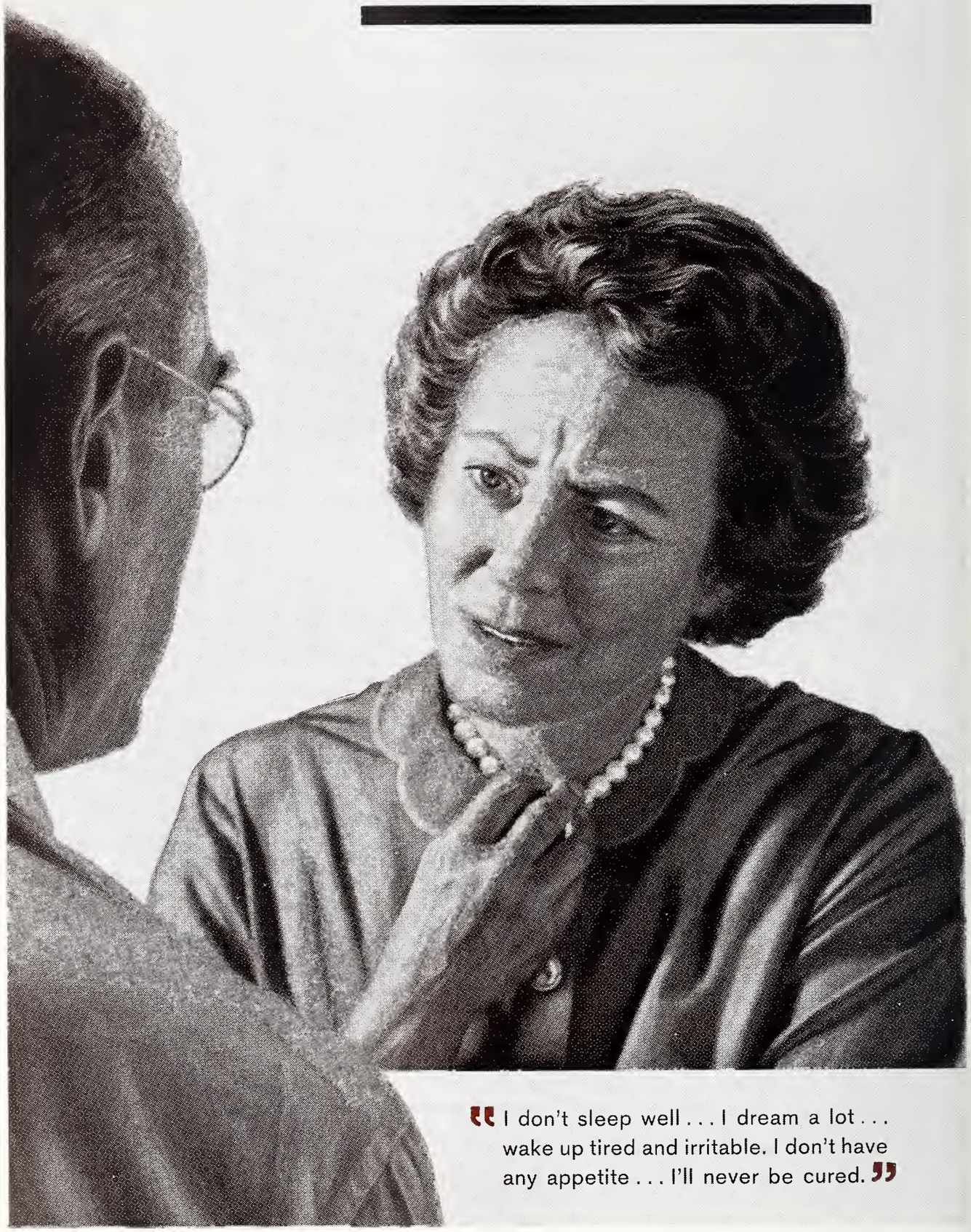
Metamucil, therefore, fulfills a basic function in the treatment of geriatric constipation. It both softens hard, dehydrated fecal concretions and adds smooth, nonirritant, easily compressible hydrophilic bulk.

Metamucil applies a physiologic principle to correct constipation naturally.

Average Adult Dose: One rounded teaspoonful of Metamucil powder (or one packet of Instant Mix Metamucil) in a glass of cool liquid. To Metamucil powder, a refined, purified and concentrated psyllium hydrophilic mucilloid, an equal amount of dextrose is added as a dispersing agent. Each dose of the powder furnishes a negligible amount of sodium and 14 calories. To the mucilloid in Instant Mix Metamucil citric acid, sodium bicarbonate and mild flavoring are added. Each dose of Instant Mix Metamucil furnishes 0.25 Gm. of sodium and 3 calories. Metamucil is available as Metamucil powder in containers of 4, 8 and 16 ounces and as flavored Instant Mix Metamucil in cartons of 16 and 30 single-dose packets.

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"They keep saying I'm sloppy!"



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Precautions: May produce overstimulation in high doses. Discontinue if muscular twitchings or clonic convulsions occur. The flush produced in sensitive individuals is transient and harmless.

Average Dose: 1 to 2 tablets (or capsules) 3 times a day. 1 teaspoonful elixir 3 times a day.

Formula: Each tablet or capsule contains:
Pentylenetetrazol.....100 mg.
Nicotinic Acid.....50 mg.
Each teaspoonful (5 cc.) elixir contains:
Pentylenetetrazol.....200 mg.
Nicotinic Acid.....100 mg.
(as the sodium salt)
Alcohol.....5%

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Drug Producers Challenge FDA Regulation

Thirty-seven prescription drug producers and the Pharmaceutical Manufacturers Association went into a federal district court on Sept. 5 to challenge the legal validity of a drug advertising and labeling regulation recently promulgated by the Food and Drug Administration.

The action, filed in the U. S. District Court in Wilmington, Del., alleged that the regulation is "unauthorized by and contrary to law."

Secretary of Health, Education, and Welfare Anthony J. Celebrezze and Food and Drug Commissioner George P. Larrick were named as defendants.

The controversial regulation was issued last June 20 as a result of the 1962 amendments to the Food, Drug, and Cosmetic Act. The amended law requires only that "established names" of prescription drugs be printed in labeling and advertising "prominently and in type at least half as large as that used for any proprietary name," while on the other hand the regulation would require the established name to appear "each time" the protected trademark or brand name appears.

Established names of drugs usually are originated by manufacturers in cooperation with the U. S. Pharmacopeia and the American Medical Association. An established name may be used by any producer to identify the active or therapeutic ingredient in a drug product. In contrast, a protected brand name may be used only by a single producer to identify himself and his product.

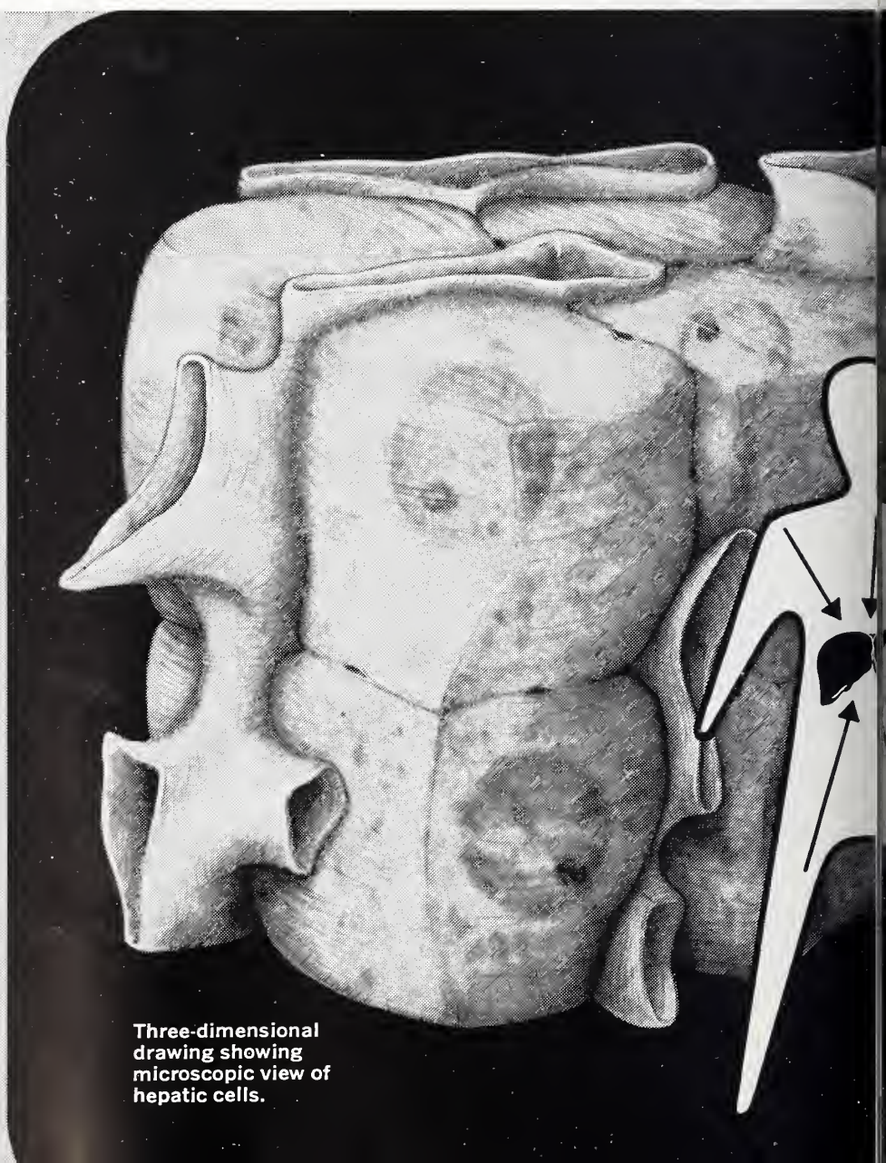
Manufacturers who place brand names on products are thus indicating willingness to stand behind the quality and purity of their products. The plaintiffs pointed out that drugs with the same established name may differ in therapeutic effect because of varying inactive ingredients and manufacturing methods.

The plaintiffs said that, in addition to going beyond statutory authority, the regulation requiring repetition of the established name with each use of a protected brand name on a container label, in a package insert, or in any advertising to physicians would be confusing and would make reading more difficult, to the detriment of doctors and ultimately their patients.

PMA, which represents producers of more than 90 per cent of U. S. drugs, and the other plaintiffs told the court that the firms also will be subject to substantial expense if they must revise advertising and labeling materials to conform to the regulation.

when the liver
is threatened or
damaged by fat
in
cirrhosis
alcoholism
hepatitis
obesity
diabetes

METHISCHOL®



Three-dimensional drawing showing microscopic view of hepatic cells.

The Sept. 5 action marks the first time in the 25-year history of the Food, Drug, and Cosmetic Act that the prescription drug industry has instituted a court action to invalidate an FDA regulation.

7,000 Registrations Expected At AMA Portland Meeting

More than 7,000 physicians and their guests are expected to converge Dec. 1-4 on Portland, Ore., for the 17th Clinical Meeting of the American Medical Association.

It will mark the first time that the AMA has held a clinical meeting in Portland. The association has held two of its annual meetings in Portland, however, in July, 1905, and in July, 1929.

Dr. Otto C. Page, general chairman of arrangements for the December meeting, said nearly all of the scientific sessions will be held in Portland's new Memorial Coliseum. The scientific and industrial exhibits also will be shown there. Conveniently located within a few miles of the business district, the multi-million dollar Coliseum offers new facilities throughout.

When the AMA held its clinical meeting in Seattle in 1956, the total physician attendance was 3,032.

"We feel," Dr. Page said, "that this figure will be much higher when the AMA meets in Portland."

The secretary-treasurer of the AMA Board of Trustees, Dr. Raymond M. McKeown, lives in Coos Bay, Ore., and he, too, expects an exceptionally high attendance.

"The majority of doctors," he said, "will come from the Pacific Northwest, but there should be good representation from other states along the West Coast and also from the Mountain states."

Lectures, panels, symposia, and breakfast roundtables again will be presented at the Portland meeting on specially selected topics, as well as color television and medical motion pictures. More than 100 physicians will deliver lectures on the scientific program during the four-day meeting, and more than 200 scientific and industrial exhibits will be shown at the Coliseum, many of which will be based on new scientific research.

Dr. Huldrick Kammer, chairman of the Scientific Program Committee, said the scientific exhibits are an important part of the clinical meeting and added that "their long and continued popularity at AMA meetings is good evidence of their teaching value to the physician. The exhibits are so varied that the medical subject matter has some interest to every physician regardless of specialty."

METHISCHOL ... the original, complete lipotropic formula together with a low fat, moderate protein diet, helps to prevent and treat fatty infiltration and fatty degeneration of the liver, and consequent cirrhosis by helping to...

remove infiltrated fat and thus reduce liver size and tendency to fibrosis

contribute to increased phospholipid turnover and regeneration of new liver cells

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CHOLINE DIHYDROGEN CITRATE*	2.5 Gm.
dl, METHIONINE	1.0 Gm.
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VITAMIN B_{12}	18 mcg.
LIVER CONCENTRATE AND DESICCATED LIVER**	0.78 Gm.

*Present in syrup as 1.14 Gm. Choline Chloride
**Present in syrup as 1.2 Gm. Liver Concentrate

capsules: 100, 250, 500, 1000; **syrup:** 16 oz. and 1 gallon

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FOR EFFECTIVE CONTROL . . . OF MOST UNNECESSARY COUGHS

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(For prompt relief of a wide variety of coughs, including those associated with colds, bronchitis, throat irritations, influenza, asthma, smoking, smog, dust irritation, and excessive use of the voice.)

EACH FLUID OUNCE CONTAINS:	
64.8 mg.	**CODEINE PHOSPHATE***—For its well-known actions in suppressing unnecessary and nonproductive coughs, AND to decrease the viscosity of sputum.
6 mg.	**CHLORPHENIRAMINE MALEATE**—To correct those allergic components which may be due to histamines. (The antihistaminic may contribute the usefulness of this preparation if locally released histamine plays a role in the process which causes the bronchial irritation.)
600 mg.	**GLYCERYL GUAIACOLATE**—To increase the fluidity of respiratory tract secretions. This action decreases the irritating effect of inspissated mucus and facilitates its removal.
2.5 gr.	**TOLU**—Because Tolu has been found useful on an empirical basis for coughs of diverse etiology.
2 min.	**CHLOROFORM**

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Codeine phosphate may be habit forming. In very large doses it may depress respiration.

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Administration and Dosage:
For Adults: 1 teaspoonful which may be repeated every 3 or 4 hours.

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For peptic ulcer gastric hyperacidity and gastritis...

In year-long study on peptic-ulcer patients

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Antacid Tablets

*"...faster in onset of action...and for a longer period"**

"Clinical studies in 85 patients with duodenal ulcer ...confirmed the superiority of the new preparation [new Creamalin] over standard aluminum hydroxide preparations, in that prompt relief was achieved and maintained throughout the period of observation."*

Patients were followed for about one year.

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Each new Creamalin tablet contains 320 mg. of specially processed highly reactive dried aluminum gel (stabilized with hexitol) with 75 mg. of magnesium hydroxide. Minute particles offer a vastly increased surface area.

Dosage: Gastric hyperacidity—from 2 to 4 tablets as needed. Peptic ulcer or gastritis—from 2 to 4 tablets every two to four hours. *How Supplied:* Bottles of 50, 100, 200 and 1000.

Now also available—New Creamalin Improved Formula Liquid. Pleasant mint flavor—creamy pink color. Stabilized reactive aluminum and magnesium hydroxide gel (1 teaspoon equals 1 tablet). Bottles of 8 and 16 fl. oz.

Creamalin, trademark reg. U.S. Pat. Off.

*Schwartz, I. R.:
Current Therap. Res. 3:29, Feb., 1961.

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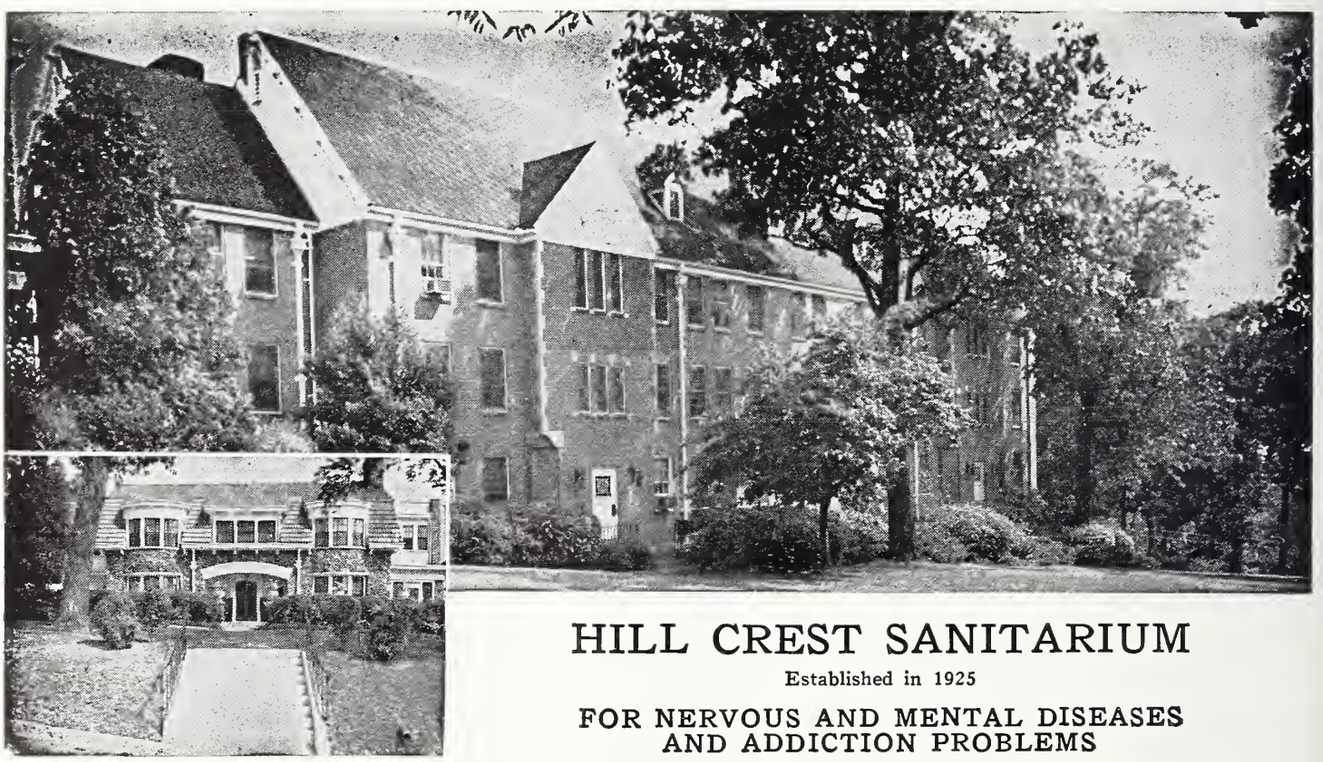
Medical Assistants Plan October Meeting

A symposium on mental health, an address by the president of the American Medical Association, and a discussion on electronics in the medical office will highlight the seventh annual convention of the American Association of Medical Assistants Oct. 9-13 in Miami Beach.

More than 500 physicians' aides are expected to attend the meeting, according to Miss Alice Budny, Milwaukee, Wis., AAMA president. Headquarters will be the Eden Roc Hotel.

A panel review of mental health problems frequently seen in the doctor's office will be featured on the Saturday, Oct. 12, program. Panel members are: Drs. Charles H. Carter, Orlando, Fla., medical and research director of a hospital for the mentally retarded; Ner Littner, Chicago, a psychiatrist who specializes in psychoanalytic treatment of children with emotional difficulties; William F. Sheeley, Washington, D. C., chief of the American Psychiatric Association-General Practitioner Education Project, and John D. Ainslie, director, outpatient service, the J. Hillis Miller Health Center, Gainesville, Fla.

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Out-Patient Clinic and Offices

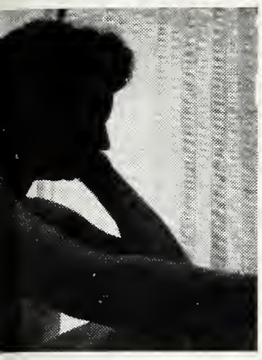
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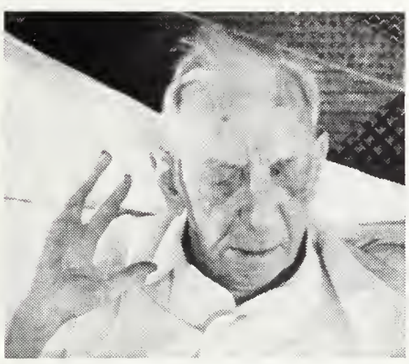
The woman in menopause



Anxious depression



nstrual tension



The agitated senile patient



The alcoholic



The problem child

the original brand of meprobamate

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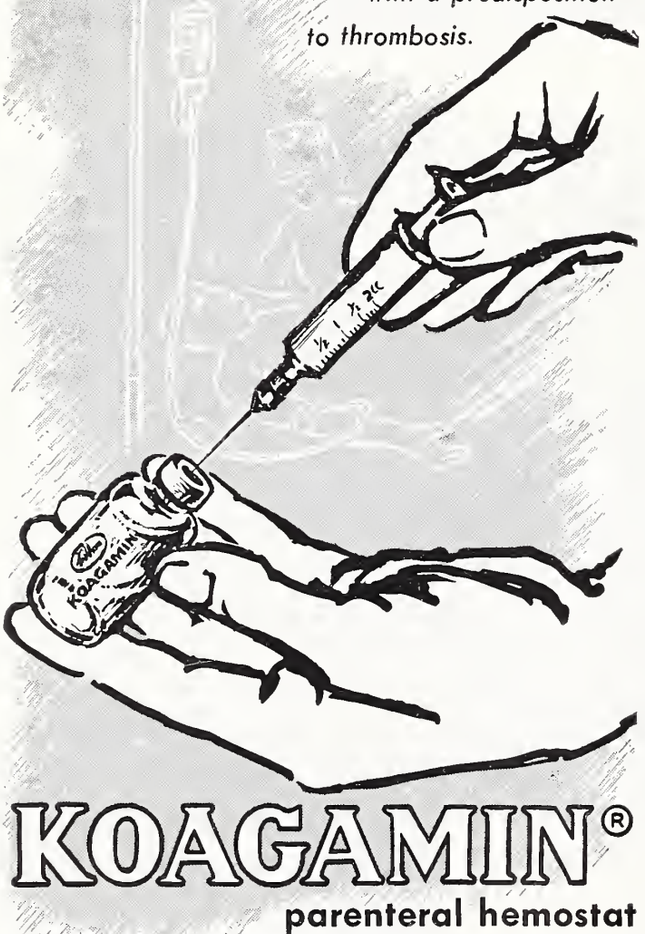
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Each cc contains: 5 mg. oxalic acid, 2.5 mg. malonic acid, phenal 0.25%; sodium carbonate as buffer.

Complete data with each 10cc vial. Therapy chart on request.

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That same day, AMA President Edward R. Annis, Miami, will speak on "The Fatigue of Support." Also scheduled for Saturday is a workshop session devoted to discussions of state and county membership publications and the AAMA certification and educational programs.

Among the speakers at the general session on Friday, Oct. 11, will be Dr. William T. Mixson, Jr., Coral Gables, Fla. Dr. Mixson's topic is "Modern Medicine for the Modern Woman."

AAMA's advisory committee will also meet during the convention. Members are: Drs. Carl E. Clark, Sycamore, Ill., chairman; R. A. Royster, Evansville, Ind.; James D. Weaver, Erie, Pa.; Fred H. Albee, Jr., Daytona Beach, Fla.; Russell Fisher, Baltimore, Md.; Daniel E. Dorchester, Sturgeon Bay, Wis.; John C. McClintock, Albany, N. Y.; Glenn E. Millard, Detroit, Mich., and Paul F. Orr, Perrysburg, Ohio. Dr. Wesley W. Hall, Reno, Nev., will attend the meeting as official representative of the American Medical Association.

The American Association of Medical Assistants is a confederation of 35 constituent state chapters. Its 11,000 members are physicians' office aides who are working under the supervision of a doctor of medicine. State and local chapters must have physician advisory committees and the approval of the local medical society.

Oral Cancer Conference Set for Miami

Members of the dental and medical professions in Florida and throughout the southeastern states are extended an open invitation to attend the special Conference on Oral Cancer which will be conducted at the Hotel Fontainebleau, Miami Beach, Fla., Tuesday, Oct. 8.

There is no registration fee, but advance notification of attendance is desired. Notice should be mailed to J. Leon Schwartz, D.D.S., Chairman, Conference on Oral Cancer, 201 West Platt St., Tampa 6, Fla. Room reservations should be made directly to the hotel of choice.

The conference which features a roster of nationally known speakers is being presented by the American Society of Oral Surgeons, the Florida Division of the American Cancer Society, in cooperation with the National Institute of Dental Research.

The registration desk will open at 8:00 a.m. The conference will be called to order at 8:45 a.m., J. Leon Schwartz, D.D.S., Tampa, presiding. Edward G. Thompson, D.D.S., president of the

(Turn to page 41)

American Society of Oral Surgeons will welcome the assembly.

The morning sessions are as follows: 9:00 a.m., "Studies in the Viral Etiology of Cancer," C. Gordon Zubrod, M.D., director of intramural research, National Cancer Institute, National Institute of Health, Bethesda, Md. 9:40 a.m., "Oral Exfoliative Cytology," George W. Greene, Jr., D.D.S., professor and chairman, Department of Oral Pathology, State University of New York at Buffalo. 10:30 a.m., "Radiotherapy of Oral Cancer—Present Status," John T. Mallams, M.D., clinical professor of radiotherapy, Baylor University Dental School, Dallas. 11:10 a.m., "Prosthetic Rehabilitation of the Post-Surgical Oral Cancer Patient," Ralph S. Lloyd, D.D.S., assistant surgeon general, chief dental officer, U. S. Public Health Service, Washington, D. C. 11:50 a.m., "What the Doctor Should Know About Oral Pathology," Lester R. Cahn, D.D.S., professor of oral pathology, Faculty of Medicine, Columbia University, New York City.

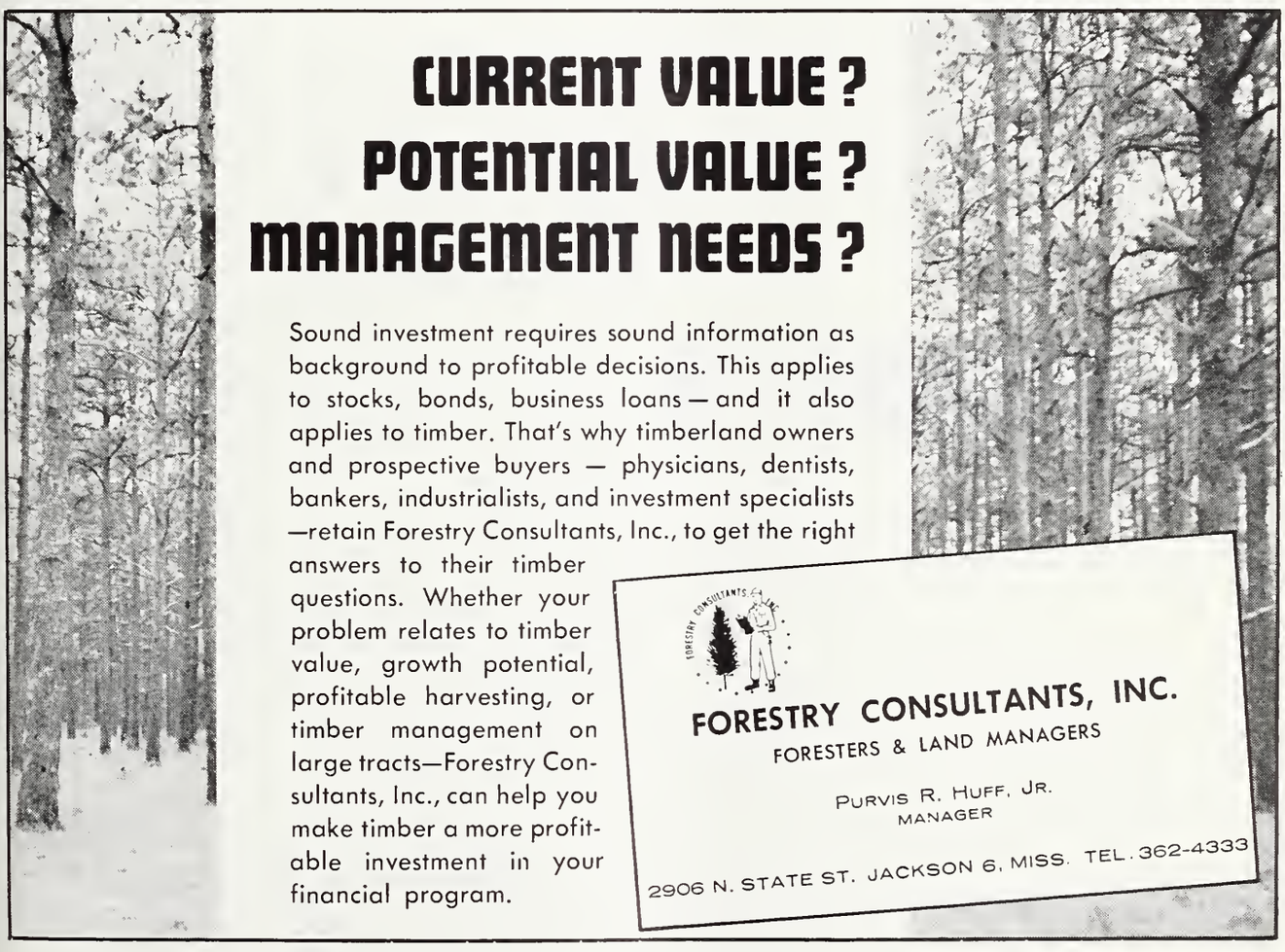
The afternoon sessions are as follows: 1:30 p.m., "New Concepts in Diagnosis and Surgical Treatment of Oral Malignancies," Colonel Robert B. Shira, Dental Corps, U. S. Army chief of dental service, Walter Reed Medical Center, Washington, D. C. 2:10 p.m., "Cancer Teaching in a Resident Training Program," Thomas J. Cook, D.D.S., director, Department of Oral Surgery, Jackson Memorial Hospital, Miami, Fla. 2:50 p.m., "Secondary Tumors of the Mandible," Bertram Cohen, D.D.S., Department of Dental Science, Royal College of Surgeons of England, London. 3:30 p.m., "Question and Answer Period."

Applications for Thoracic Research Awards Asked

Applications for research grants awarded by the American Thoracic Society, medical section of the National Tuberculosis Association, will be accepted until Dec. 15, 1963.

Grants will be awarded for medical and social research in the field of respiratory diseases, including tuberculosis, for the year beginning July 1, 1964.

Further information and forms may be secured from the Division of Research & Statistics, American Thoracic Society, 1790 Broadway, New York 19, N. Y.



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Articles for Publication

Manuscripts should be typewritten, double spaced on one side of the paper. Tables, charts, and tabulations should be submitted on separate sheets but their position in the text should be indicated. Authors are encouraged to limit bibliographies to 10 references, written in conformation to style utilized in scientific publications of the American Medical Association. Articles are accepted for publication on the condition that they have not been previously published and are contributed solely to this JOURNAL.

A thesis summary of 75 to 100 words must accompany each manuscript separately from the text. Figures and drawings are acceptable when prepared with black ink on white paper. Photographs for illustrations should be unmounted, untrimmed, glossy prints and all such material must be identified. No charges are made to authors for illustration engravings not exceeding four column inches per printed page.

Reprints may be obtained at cost from the association. The right is reserved to decline any manuscript for publication. Ordinarily, manuscripts submitted will be acknowledged whether published or not.

'THEY HAD TO CARRY CARIES . . .'

There is a new burbon base dentifrice on the market which has been tested over a period of six months by a group. The findings were that each had 40 per cent more cavities and couldn't care less.

—GENE BRENNER in *Parade*

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FOR SALE: Kelley-Koett x-ray equipped for head pictures with accessories, good as new. Can be seen at office, 239 Pontotoc St., Houston, Miss. G. G. Armstrong, Sr., M.D.

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Aspirin	200 mg.
Caffeine	30 mg.

*Warning—may be habit forming

'Emprazil-C' Tablets are available on prescription only.

Dosage: Adults and children over 12 years—1 or 2 tablets—3 times daily as required. Children 6 to 12 years—1 tablet—3 times daily as required. **Caution:** While pseudoephedrine is virtually without pressor effect in normotensive patients, it should be used with caution in hypertension. Also, while chlorcyclizine has a low incidence of antihistaminic drowsiness, the usual precautions should be observed. **Supplied:** Bottles of 100 tablets.

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Volume IV
Number 11
November 1963



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THIS MONTH

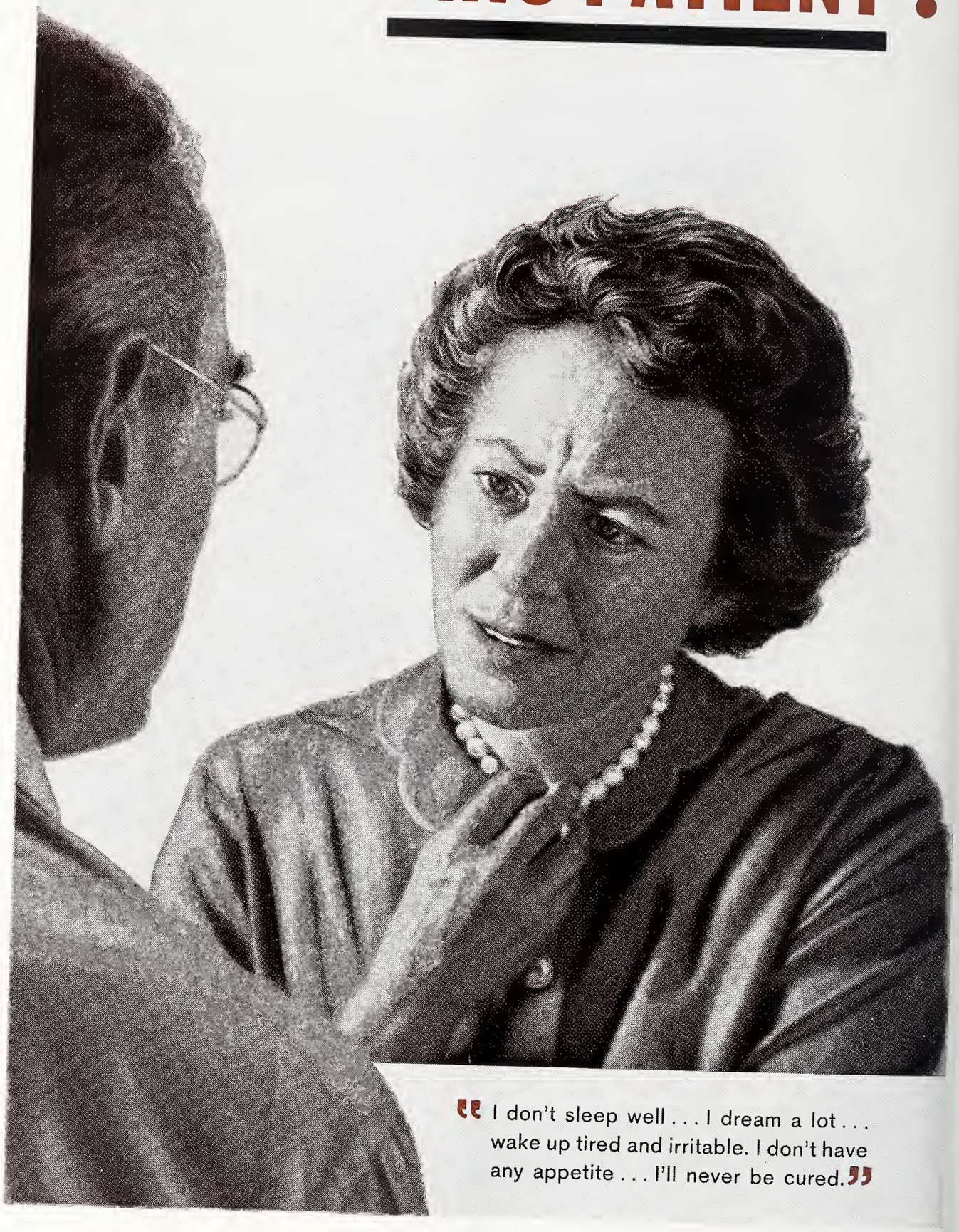
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RECOGNIZE THIS PATIENT?



"I don't sleep well . . . I dream a lot . . . wake up tired and irritable. I don't have any appetite . . . I'll never be cured."

NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION
JACKSON, MISSISSIPPI

November 1963

Dear Doctor:

Mississippi is one of the "best states for a murder," says the National Municipal League, crusader for medical examiner laws. New report from NML lists 15 states where lax coroner laws still prevail and 17 in which medicolegal situation is only slightly better. Only three of former are in South.

> Watered-down autopsy law enacted by Mississippi legislature in 1960 falls short of NML minimums for good statute. Most medical examiner systems were modeled after Massachusetts' where noted forensic pathologist Richard Ford founded NML.

New bill in Congress seeks improvement in Keogh program of voluntary retirement plans for self-employed. Sponsored by Rep. Eugene Keogh (D.,N.Y.), H.R. 8711 would permit full tax deduction of 10 per cent or $2,500 of annual income and remove percentage and dollar limitations for self-employed who set up plans for employees. Identical measure is sponsored in Senate by Sen. George Smathers (D.,Fla.).

The shoe's on the other foot for Walter Reuther, foremost labor promoter of compulsory federal medical care under Social Security. Members of Reuther's national headquarters staff are forming their own union to bargain with him as employer. Wire stories quote UAW president as being "hurt and shocked."

Eleven more states have passed Good Samaritan laws during 1963 legislative sessions, raising total to 25 from half dozen in just two years. Mississippi was ninth state to offer civil liability immunity to physicians who render care at emergency scenes. New laws were passed in Connecticut, Indiana, Maryland, Michigan, Montana, Nevada, New Hampshire, New Mexico, Ohio, Pennsylvania, and Tennessee.

Veterans medical benefits are being quietly expanded with addition of liberal nursing home care program. House just passed measure on non-record voice vote to authorize 2,000 additional nursing home beds, increase VA payments to state homes, permit transfers from VA hospitals to public or private nursing facilities, and furnish federal construction funds for homes through VA.

Sincerely,

Rowland B. Kennedy
Executive Secretary

DATELINE - MEDICAL AMERICA

'Public Service' Drugs Are Threatened By Tough FDA Policies

New York - Availability of public service or prestige drugs, infrequently used in treatment of rare conditions, is threatened by the new, tough FDA regulations on clinical testing. Cutter no longer supplies rare blood components to investigators and future of SKF's IDU for herpes keratitis may be in doubt. Such items are produced without hope of profi and many, such as Lederle's botulism anti-toxin, are given without charge.

Tax Cut Bill Trims Medical Expense Deductions

Washington - Two key medical expense income tax deductions will be all but wiped off the books if Senate passes House version of administration's tax reduction and reform bill. All accident and health insurance medical benefits in excess of actual medical expense would be taxed and $100 per week sick pay exclusion would be allowed only after 30 days illness.

House Officer Stipends Show Upward Trend

Detroit - Studies by Parke-Davis reflect sharp upward trend in intern stipends over six year period. Hospitals affiliated with medical schools have raised salary levels 120 per cent to mean of $191 per month. Increase in non-affiliated institutions is 79 per cent. Mean increase for residents is even higher with all but 16 per cent of 30,000-odd residencies currently filled. Training program expansions relate to foreign graduate influx because one out of four residents is foreign trained.

Administration Panel Urges Federal 'Consumer Guidance'

Washington - JFK's Consumer Advisory Council, in its first report, recommended "federal guidance" and "standardization" for American purchasers on everything from homes to health services. The 11 member group, mostly college professors and professional liberals, deplored "failure of government machinery to assure specific consideration of the consumers' needs." Report advocated monthly newsletter to everybody "prepared and distributed by (federal) consumer assistants."

Physician Is Awarded Damages For Slander After Liability Suit

Bellflower, California - Pediatrician W. J. Hanley received $18,500 in general and punitive damages in successful slander suit against attorney Robert H. Lund who had represented a plaintiff against doctor in an unsuccessful malpractice action. Hanley successfully proved that Lund slandered him during first suit by issuing press statement going beyond allegations in plaintiff's charge. Citation is Hanley v. Lund, 32 Cal. Rptr. 733 (Cal., July 25, 1963).

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
November, 1963, Vol. IV, No. 11

ORIGINAL PAPERS

Progressive Systemic Sclerosis

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Scleroderma is a collagen tissue disorder of unknown origin. The term Scleroderma is of Greek origin meaning "hard skin." The author discusses the clinical and pathological changes associated with scleroderma and reviews the literature. He concludes with three case reports.

VAGUE INACCURATE descriptions of a disease similar to scleroderma were first given by Hippocrates and Galen. It was not until 1753 that Carlo Cruzio, an Italian, recorded a convincing description of scleroderma. The first published report of this disease in the American Medical literature was by A. B. Arnold in 1869.[1] With a better acceptance of collagen disorders and, more specifically, connective tissue diseases in general, the advancement in recognition and understanding of scleroderma has been extremely rapid.

ORIGIN OF TERM

The term *scleroderma* is of Greek origin and means "hard skin." This served to describe the disease as it was recognized in the earliest form. The recognition of generalized involvement created considerable confusion of description and terminology in the previously recognized local skin disorder. In 1945, Goetz,[2] emphasized the systemic visceral involvement of the scleродermatous process and crystalized the concept that the cutaneous manifestations were only a part of a truly generalized pathological state. He suggested the term scleroderma be abandoned and progressive systemic sclerosis be used until a more concise etiology could be established.

Scleroderma is a collagen tissue disorder of unknown origin. Recent studies by Fisher and Rodman,[3] have shown that the collagen fibrils in scleroderma are actually no different from normal collagenous tissue, suggesting that the defect in this disease is the result of some abnormal stimulation in the deposition of collagen tissues. Altschule and Angwine[4] in 1949 revealed fibrinoid changes in the ground substances in conditions that were not related in any way to hypersensitivity reactions. Piper and Helwig[5] found no relationship of heredity factors, manual labor, or chemical exposure to scleroderma.

Through the years, scleroderma has been clinically classified into morphea, acrosclerosis, and diffuse scleroderma.

MORPHEA

Morphea is a localized skin change characterized by slowly and progressively enlarging plaques which are usually grayish. These plaques are surrounded by delicate, violaceous areola. The skin is hard and bound down to underlying connective

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tissue. The plaques are usually seen on the trunk and occasionally along the distribution of a cutaneous nerve. The course and duration of the plaques are extremely variable and not predictable. Spontaneous clearing may occur, leaving no evidence of disease. There may be slow progression to localized skin atrophy, which persists indefinitely. There is no effective therapy known, though daily massages and large dosages of Vitamin B complex have been recommended.[6] The course of morphea is benign.

ACROSCLEROSIS

Acrosclerosis was at first a description of nonvisceral involvement of the acral areas. This was usually associated with Raynaud's phenomenon and usually followed a stationary course.[1] Hoskins *et al.*[7] proposed that acrosclerosis and scleroderma actually represented a spectrum of a single disease showing considerable variability in the location, extent of involvement, and rate of progression. They also opposed the clinical idea that acrosclerosis had a more favorable and milder prognosis. Tuffanelli[8] and Goetz[2] suggested that the overall disease could be considered either localized or systemic and defined both acrosclerosis and diffuse scleroderma as systemic. Acrosclerosis is much more common and found mostly in women with cutaneous manifestations associated with Raynaud's phenomenon and a more stable prolonged course. Diffuse scleroderma is much less common. Raynaud's phenomenon was not as often detected in the diffuse group, and the clinical course was much more rapid. The prognosis is generally more severe.

PATHOLOGICAL CHANGES

The underlying pathological changes are those of collagen abnormalities. Early in the progression of the disease is seen swelling and fragmentation of the collagen fibrils with fibrinoid degeneration. There is usually arteritis seen microscopically with hyperplasia of the intima and cellular infiltration of the adventitia and media. This involvement of the vessel wall compromises the blood flow. Lymphatic infiltration is seen in the corneum. Later in the disease the collagen thickens and is replaced by fibrinous tissue. There is usually atrophy of the hair follicles and sweat glands. Frequently, calcification develops. Necrosis and ulcerations usually follow.[6, 9, 10]

The cause of death is usually attributed to more than one feature of progressive systemic sclerosis. Fatal disturbances more frequently occur as a result of myocardial involvement, renal and pulmonary insufficiency, and cachexia. Occasionally spontaneous rupture of the gastrointestinal tract occurs.[11] Infections are frequent.

CLINICAL SPECTRUM

The clinical spectrum of progressive systemic sclerosis is extremely variable and widely disseminated. Probably the most common presenting symptom is vague, diffuse arthralgia, though eventually the skin is involved in almost all the patients.[5, 8] The development of systemic involvement or Raynaud's phenomenon may precede by a variable time any noticeable cutaneous manifestations. The occurrence of Raynaud's phenomenon has been reported from 47 per cent to 93 per cent of patients who were diagnosed as having progressive systemic sclerosis.[5, 8, 9, 12]

SKIN INVOLVEMENT

The early skin involvement is recognized clinically as diffuse or localized brawny edema. The more frequent changes seen at the time of diagnosis, however, are in the later sclerotic stage. The atrophic stage of skin manifestation develops later in the progression of the disease. The characteristic change includes inelasticity of shiny glistening skin, usually bound tightly to the underlying subcutaneous tissue, ulcerations, pigmentary changes, and calcinosis cuti. There is also involvement of the underlying musculature with wasting of muscle mass, weakness, and soreness.

The gastrointestinal tract is involved in about 60 per cent of the patients with progressive systemic sclerosis.[5, 7] Sclerosis and fibrosis of the serosa, submucosa, and muscularis are the underlying morphological changes with varying degrees of replacement with connective tissue. The esophagus is the most frequently involved area of the gastrointestinal system. There is muscular atrophy and diminished peristaltic activity with secondary dilatation. The dilatation is not usually to the extent as seen in achalasia. Clinically there is dysphasia, substernal fullness, regurgitation, waterbrash, and recurrent nausea. The stomach is likewise atonic with decreased peristalsis and delayed emptying time. Gastric and duodenal ulcerations are not common, but have been observed.[5, 7, 8] In the small bowel localized dilatation occurs, especially in the second and third portions of the duodenum.[13] Clinically, there may be epigastric

pain, gaseous distention, and alternating diarrhea and constipation. Intestinal malabsorption has been observed though the exact mechanism is obscure.[14] Tuffanelli[8] describes infrequent hepatic involvement with rare development of jaundice. The presence of hepatosplenomegaly was thought to result primarily from myocardial insufficiency. Abnormal liver function tests, especially the flocculation tests, most likely reflect the abnormal protein metabolism and general cachectic condition.

Scleroderma may be associated with extensive pulmonary alterations, both anatomically and functionally. The morphological changes reflect an increase in collagenous connective tissue and interstitial fibrosis. There is thickening of the alveolar septum with compensatory emphysema. The dense, taut, intra-alveolar septum not infrequently ruptures creating various-sized pulmonary cysts. Diffuse pulmonary mottling and linear infiltrations are seen bilaterally, usually in the lower lobes. Pleural involvement and reactions are rare unless there is complicating secondary inflammatory change which is unfortunately very common. Alveolar-capillary block syndrome, respiratory insufficiency, increased pulmonary arterial pressure, and eventually cor pulmonale will develop with extensive sclerodermatous lung involvement. Clinically, the symptoms of pulmonary involvement are rather late in the course of the disease and consist predominately of dyspnea and a mild productive cough.[5, 8, 9, 15]

MYOCARDIAL FIBROSIS

The important change of sclerodermatous heart disease is myocardial fibrosis. Usually there is minimal atherosclerotic coronary artery disease noted.[15] The clinical evidence of heart involvement more frequently occurs much later than cutaneous manifestations. As a result of myocardial fibrosis, bilateral congestive heart failure occurs. Escudero and McDevitt[15] found the electrocardiogram to be abnormal in 25 per cent of 60 patients who had scleroderma without any apparent visceral involvement. In 75 per cent of the patients with visceral involvement, there were definitely abnormal changes on the electrocardiogram. Notching of the P-wave was the most frequently observed electrocardiographic change. Other changes included left ventricular hypertrophy, low voltage, incomplete right bundle branch block, and subepicardial ischemia.

Significant renal involvement due to progressive systemic sclerosis is usually a late occurrence.[5, 8] There may be a low grade, chronic proteinuria through the course of the disease. Terminally, it is not uncommon to observe a rapidly progressing, malignant, hypertensive, cardiovascular-renal syndrome. This malignant phase in scleroderma renal disease is indistinguishable from malignant nephrosclerosis. The cause of the hypertensive reaction is not understood. Fisher and Rodman[17] suggested it might be due either to severe renal vasospasm or to some form of generalized vascular hypertonicity. The morphological changes include thickening of the glomerular basement membrane, fibrinoid necrosis in the arteriolar and capillary walls, and intimal hyperplasia of the interlobular vessels.

BONE INVOLVEMENT

Bone and joint involvement is an outstanding feature of progressive systemic sclerosis. Polyarthralgia may be the initial presenting symptom. There may be primary bone disease and joint involvement or secondary factors due to the cutaneous changes and general tissue debilitation. Acute frank arthritis is far less common than vague, diffuse stiffness and joint pains. Most patients have osteoporotic changes, probably due to disuse and immobility. There is absorption of the bone in the tips of the terminal phalanges with resultant shortening and deformity of the fingers and hand. Osteopoikilosis or "spotted bone disease" has been described.[5, 8]

The central nervous system is also involved with systemic scleroderma. The underlying pathological changes seem to be ischemic vascular encephalopathy with many minute infarcts. Frequently, generalized headache and mental depression have been noted. Occasionally, peripheral neuropathy develops. Lainward *et al.*[19] observed the electroencephalogram in 52 patients with scleroderma. He found abnormal tracings in 28 and borderline tracings in 7 patients. There were no definite autopsy corroborations with the clinical findings, suggesting the alterations were either vascular or chemical. General convulsive conditions occur in scleroderma. Bourne *et al.*[20] found that convulsions were more frequently seen late in the disease, especially when there was renal involvement. This suggested the convulsions might be related to the presence of uremia and hypertension.

Unlike some of the other collagen diseases, there are no characteristic hematological or biochemical changes seen with progressive systemic sclerosis. A mild anemia may be noted as well as an inconsistently increased erythrocytic sedementation rate. The blood calcium is usually normal

as well as the uric acid. Electrophoretic studies revealed hypergammaglobulinemia in approximately 50 per cent of the patients in a study by Rodman.[18] Positive latex agglutinations are seen in some patients and occasionally a lupus erythematosus (L.E.) cell preparation will be positive. A flat oral glucose tolerance curve will be seen occasionally, but this is usually in association with a malabsorption syndrome.

DRUG THERAPY

No specific effective drug therapy is presently available for the treatment of progressive systemic sclerosis. Steroid hormones including ACTH have been used extensively, but without appreciable success.[7] Tuffanelli[8] suggested that steroid preparations actually may be harmful in the treatment of scleroderma, especially in those patients with hypertension and renal involvement. Various vasodilating agents have been disappointing, though Dibenzyline (phenoxybenzamine) has offered some temporary relief.[21] Surgical sympathectomy may be temporarily beneficial, but does not significantly alter the course of the disease.[22] Paraaminobenzoic acid has also been used with disappointing results. Various chelating agents are presently being tried with some enthusiasm. Nelder *et al.*,[23] however, found no lasting effect by chelation though there was some temporary relief. Repeated courses of chelation do not seem to be of any great benefit. Physical therapy as a means of preventing joint deformity and the prevention of unnecessary exposure to cold to minimize vasospasm seems to be the most beneficial symptomatic relief available.

In the following three case reports are exemplified a great many of the clinical features of scleroderma as well as some of the problems encountered in the natural progression of the disease.

CASE REPORT 1

This 53-year-old white male was seen in June 1959 for evaluation of a rash on his chest and headaches. About six weeks previous to the hospitalization the patient and his family noticed that his face was quite ruddy. The patient had noticed that his facial skin had become quite tender, particularly while shaving. Frontal headaches had developed, which at first were intermittent but over the three weeks prior to admission had become quite constant. Various medications were given by his local physician to relieve his headaches. A rash developed over his chest, approximately one week after instituting therapy. The rash had spread over both shoulders, into both upper extremities, the middle portion of the trunk, and across the back. There was considerable pruritus. The rash, which was red and elevated, at first appeared discrete but later became confluent and gradually extended to the areas of the described involvement. It had been thought that the rash was a drug reaction. However, the patient gave no previous history of sensitizations, or drug toxicities.

For several months he had noticed the onset of progressive exertional dyspnea. He described no coughing, no evidence of pulmonary infection, nor symptoms suggesting obstructive disease. For many years he had smoked one to two packages of cigarettes daily. Along with the dyspnea was described weakness on exertion and a very definite marked decrease in exercise tolerance. He gave no symptoms referable to the gastrointestinal tract. There was no arthralgia. He had no symptoms of urinary tract disease. There had been no weight loss.

The past medical history was not significant, except that from December 1955 until June 1957 he had considerable difficulty with low back pain and had three lumbar discs removed surgically. The important finding during these hospitalizations was the presence of a persistent elevation of the hemoglobin to 18 or 19 gm. with an hematocrit of 55 to 58 vol. per cent.

He was a well-developed, well-nourished white male and, except for the dyspnea, was not in acute noticeable distress. The blood pressure was 120/80. His pulse was 92 and regular. He was afebrile and his respirations were 24 per minute. There was a slight increase in the AP diameter of the thoracic cage. The breath sounds were of good quality with slight prolongation of the expiratory phase of respiration. No rales or wheezes could be detected. The cardiac evaluation was normal. An erythematous macular rash was seen scattered over his chest, abdomen, back, upper extremities, and the upper portion of the thighs. In the periphery there were some discrete areas of involvement, but most of the rash was confluent.

The urinalysis was normal. The hemoglobin was 17.6 gm. with an hematocrit of 51 vol. per cent. Total white count was 7,600 with 84 segmented neutrophils, 16 lymphocytes, and 1 eosinophil. The sedimentation rate was 7 mm. per hour. Serum proteins were 6.06 gm. per cent with 4.58 being albumin and 2.48 globulin. The BSP retention in 45 minutes was 3 per cent. Total cholesterol was 182 per 100 ml. An L.E. preparation of peripheral blood was negative on two occasions. The total platelet count was 454,300. The uric acid was 6.5 mg. per 100 ml., and serum calcium was 5.1 mEq. The phosphorus was 2.5 mg. per 100 ml. An electrocardiogram was well within normal limits. The CO_2 combining power was 26.9 mEq. per liter.

A skin biopsy was obtained from the anterior abdominal wall involving both the rash and normal-appearing skin. The microscopic changes were those of patchy atrophy of the epidermis. Within the upper portions of the dermis, there was some edema of the collagen tissues. An inflammatory infiltrate was present and characterized chiefly by lymphocytes around the small blood vessels. Some eosinophils and occasional neutrophils were also surrounding the smaller blood vessels. The collagen of the dermis appeared increased in amount. There was atrophy of some of the hair follicles. The sweat glands appeared to be situated more deeply than normal, and occasionally lobules of glandular tissue were broken by proliferating fibrous tissue. Although the biopsy was not absolutely diagnostic, it was thought to represent sclerodermatous involvement of the skin (Figure 1).

Pulmonary function studies revealed very mild obstructive disease as manifest by a one minute timed vital capacity of 67 per cent. The two second observation was 89 per cent, and a three second reading was 93 per cent with a total vital capacity of 129 per cent of predicted normal. The maximum breathing capacity was 118 per cent of predicted normal. At rest the blood oxygen tension was 63 mm. with a PCO_2 of 30 and a pH of 7.42. After exercise the blood O_2 tension was 65 mm., the PCO_2 was 23 mm., and the pH was 7.48. The findings were thought to reflect either an alveolar-capillary block syndrome or primary vascular disease of the lung.

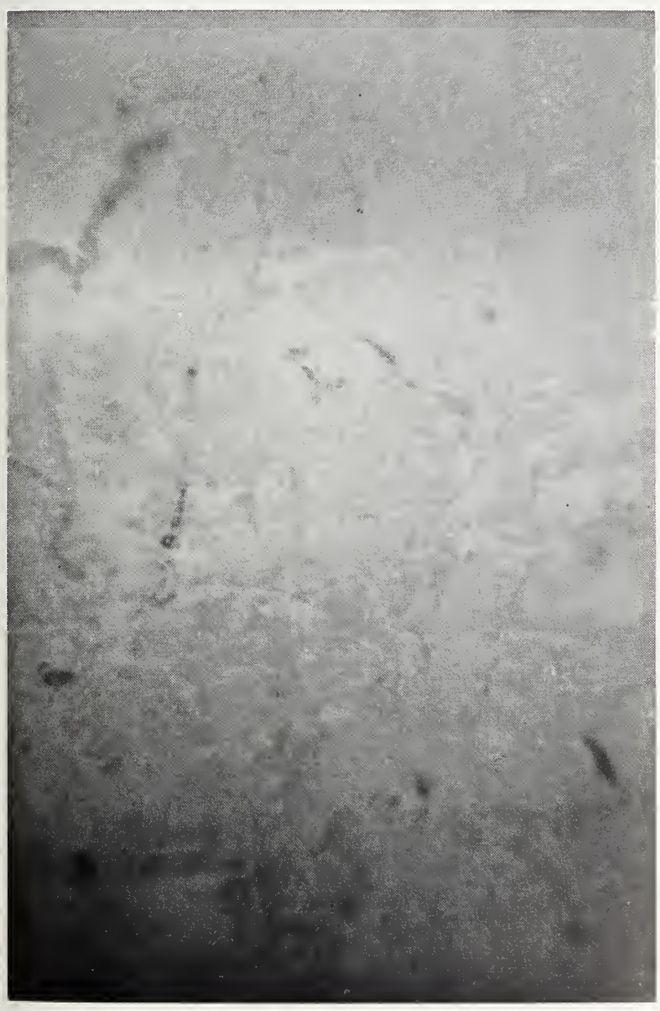


Figure 1 is a photomicrograph of skin showing the paucity of "migrating" dermal appendages with surrounding edema and disruption of the collagen tissue.

Over several days, 1500 cc. of blood were removed with complete alleviation of headaches though he still had dyspnea at rest. Intermittent positive pressure with Isuprel 1:400 solution was given at three hour intervals with very little improvement. Continuous nasal oxygen therapy at 4 liters per minute, however, did relieve his dyspnea appreciably. He was discharged from the hospital with instructions to take Medrol, 4 mg. tablets, four times a day and was encouraged to use intermittent nasal oxygen at home. It was interesting to note that the patient returned to his usual work of managing his farm. He was able to obtain almost complete relief from his symptoms, both headache and dyspnea, by the use of intermittent nasal oxygen during the night and a small oxygen tank intermittently during the day while supervising his farming operations.

In October 1959, the patient developed severe pain involving the first three fingers of the right hand. He described the classical vasospastic color changes of Raynaud's phenomenon. As the symptoms continued, superficial gangrene occurred in the finger tips of these three involved fingers. An effective right stellate ganglion block with Xylocaine was performed without any noticeable effect on the fingers involved. Vasodilan and Prescoline were given by mouth and Papaverine was given intravenously every six hours without any influence on his symptoms. Heparin was administered intramuscularly every six hours, but the effect was not easy to appraise. Local heat seemed to offer the patient more relief than any other procedure. Over the next two months, the attacks of vasospasm continued but decreased in frequency until he experienced symptoms only when allowing his hands to become extremely cold. The gangrene eventually was replaced by normal skin. The involved fingers were smaller in diameter than the others, and his skin was very sensitive to touch.

From June 1959 until October 1961 the patient did very well. He continued the steroid and oxygen therapy. During this time, he had 24 pints of blood removed because of recurrent headaches. Invariably at the time of the headaches, his hematocrit was 60 to 63 vol. per cent. After each phlebotomy the patient experienced immediate relief, lasting for several weeks.

In October 1961, he suddenly experienced an acute posterior myocardial infarction complicated by transient congestive heart failure and shock. Gradually the patient recovered with resultant anginal symptoms for four to five months, following which he had no further symptomatology. Serial electro-

cardiograms failed to return to normal. Cardiomegaly was not present.

In May 1962, the patient first noticed the onset of right lower quadrant abdominal pain. The pain was dull, intermittent, noncolicky, and did not seem to be related to eating or bowel movements. He had some urinary frequency, nocturia, urinary dribbling, and decrease in the size and force of his urinary stream. He also had noticed the onset of dysphasia, considerable upper abdominal gaseous distention, belching, bloating, and a gradually progressive weight loss. There was reduction in his appetite. Intermittent diarrhea developed in the early part of June 1962.

On June 23, 1962, the patient developed complete urinary bladder neck obstruction. Cystoscopy revealed lateral lobe hypertrophy bilaterally with intermittent obstruction and a small contracted urinary bladder. A transurethral resection was performed on June 23, 1962. Following this, the patient was completely asymptomatic and did well during the immediate postoperative period. On June 28, 1962, he again noticed right lower quadrant pains, this time, however, the pains were colicky in character and were associated with obstipation. He developed fever, abdominal distention, nausea, and vomiting, with increasing severity of the lower abdominal pain. X-rays supported the clinical findings of mechanical small bowel obstruction. An abdominal exploration was performed on July 2, 1962, to relieve the acutely obstructed small bowel. A large inflammatory mass approximately 12 cm. in diameter was found in the right lower quadrant. The mass was located about 12 to 15 inches proximal to the ileocecal valve. There was generalized small bowel distention proximal to the mass with about 200 cc. of serosanguineous peritoneal fluid. The mass involved the ileum and the surrounding small bowel which was plastered tightly in adhesive matting due to a small perforation in the ileum. The urinary bladder and the rest of the abdomen was completely normal. (On March 12, 1962, an upper gastrointestinal series and small bowel study had been reported completely normal.)

Microscopic sections taken through the perforated area revealed massive necrosis of the mucosa, submucosa, and massive infiltration with acute and chronic inflammatory cells of the muscularis. Sections close to the area of perforation revealed the lamina propria of the mucosa to be massively infiltrated with plasma cells and a sprinkling of lymphocytes and monocytes. The submucosa was markedly edematous showing diffuse infiltration with inflammatory cells, and partial replacement by collagen tissue. The muscular layer showed acute and chronic inflammatory infiltration with edema and swelling. Obliterative endarteritis of the small vessels was noted, particularly in the subperitoneal layers and in the submucosa (Figure 2). The serosa had patchy areas of marked edema with evidence of collagenization of the subserosal fat. Giant cells were noted scattered about, particularly in the subserosa.

Postoperatively the patient did relatively well, without any further complication, and was discharged on July 14, 1962. On Sept. 7, 1962, examination revealed continued weakness, anorexia, and signs of gradual weight loss. He described clinical symptoms of recurrent, intermittent small bowel obstruction.

On Sept. 12, 1962, the patient again developed evidence of complete small bowel obstruction and was re-admitted to the hospital. On Sept. 14, 1962, abdominal exploration was again performed for small bowel obstruction. At surgery, six inches of gangrenous small bowel was found with considerable inflammatory exudate located about eight inches proximal to the ileocecal valve. The diseased intestine was removed. Primary anastomosis was performed and adhesions were lysed. A thorough examination of the arterial supply of the intestinal tract revealed normal, large and medium size vessels with minimal atherosclerotic changes. Postoperatively the patient

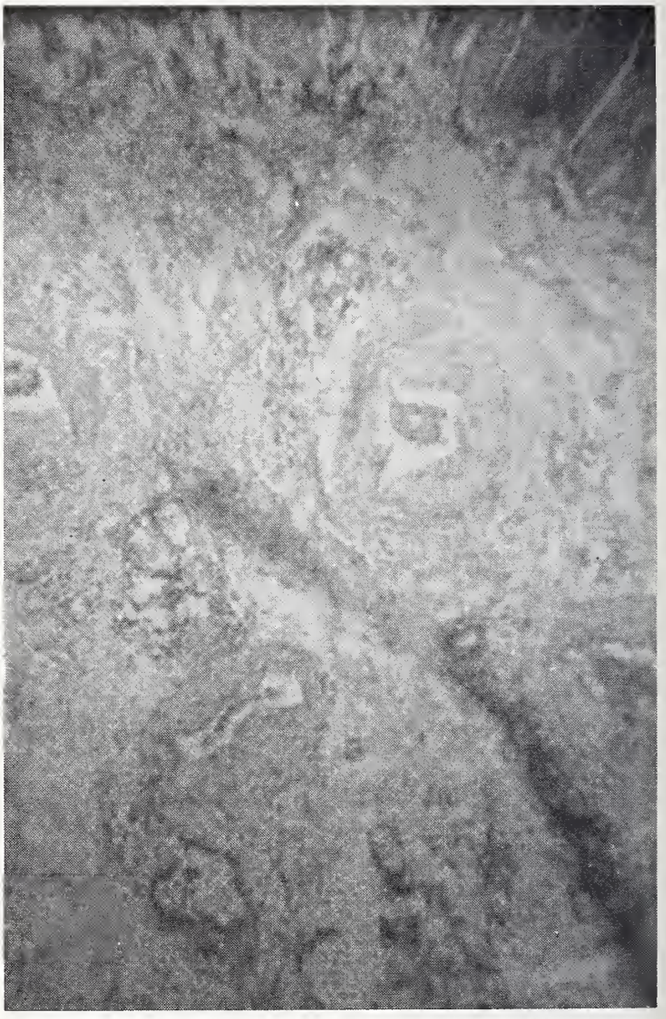


Figure 2 demonstrates perivascular inflammatory infiltration and edema with thickening of the endothelial lining of a blood vessel in the small bowel wall.



Figure 3 again reveals endothelial proliferations with round cell infiltration of a blood vessel in the small bowel wall. Note surrounding tissue edema and inflammatory infiltration.

was not free of symptoms. He continued to be febrile and required continuous intravenous infusions. On Sept. 24, 1962, the patient developed recurrence of small bowel obstruction with vomiting, severe abdominal pain and increased fever. Though it was realized very little more could be done for the patient's benefit, re-exploration was performed. Again, approximately 8 inches of gangrenous small bowel was detected and removed. Postoperatively the patient continued to have fever, tachycardia, marked debilitation, recurrent generalized abdominal pains, copious diarrhea, with nausea and vomiting. Electrolyte abnormality was a continuing almost impossible problem. Gradually the patient became comatose and expired on Oct. 3, 1962. An autopsy could not be obtained.

The case history presented above reflects a prolonged course of progressive symptomatology from systemic scleroderma. The patient presents many of the classical, well-described vascular phenomenons that are seen with arteritis from scleroderma and exhibits the complications of this process. The polycythemia was extremely intriguing. A cause was not confirmed, but it was felt that this was secondary to the sclerodermatous lung involvement. Decreased oxygen tension was found on pulmonary testing and certainly could well explain the occurrence of a secondary polycythemia. The polycythemia and headaches were clearly related and always relieved by phlebotomy.

Although an autopsy was not obtained, the findings at surgery and the clinical studies performed substantiated systemic scleroderma and left no question as to the devastation of such a disease.

CASE REPORT 2

This 34-year-old white female was admitted to the hospital on Dec. 6, 1959, for evaluation and treatment of bilateral upper extremity pain. For about 18 months she had noticed recurrent pain, numbness, tingling and paresthesias of her left hand. For two months the same sensation had been developing in her right hand. Gradually the symptoms extended from her hand to involve the wrists and elbows bilaterally. About five months prior to admission, she noticed the onset of color changes in both hands, but this was more pronounced in the left. The color changes were described as being extremely painful and were associated with severe pain, numbness, and tingling of her hands. The symptoms were more frequent during the cold weather. Handling a cold glass of liquid caused severe pain and color change. She found that keeping her hands warm minimized the frequency of the attacks. Three weeks prior to admission, discoloration of the second finger of the left hand had occurred. This became more extensive and developed the classical changes of skin gangrene. The patient described progressive, easy fatigability over the past year before admission. She denied any hypertension, renal symptoms, cardiovascular symptoms, or known serious illnesses in the past.

The blood pressure was 118/78. Her weight was 200 pounds, temperature was 98 degrees, pulse was 60, and respiration was 20. Her skin was diffusely dry, rough, and scaly. Over the left fourth finger, gangrene involved the tip of the terminal phalanx, and on the third finger a small superficial patch of gangrene was noted to the side of the finger nail. There was tissue swelling in the pretibial areas and over the dorsum of the feet, hands, and the fingers.

The hematocrit was 43 vol. per cent, and the hemoglobin was 14.1 gm. The total white count was 11,150 with a normal differential count and smear. The urinalysis was within normal limits, and L.E. preparation from the peripheral blood was normal on three occasions. The protein bound iodine was 6.1 mg. per cent per 100 ml. The blood urea nitrogen was 9.2 gm. per 100 ml. A two hour postprandial blood sugar was 78 mg. per 100 ml. The total cholesterol was 138 mg. per 100 ml. The serum protein was 5.26 gm. per 100 ml., with 2.29 albumin, and 1.87 globulin. The VDRL was nonreactive. The sedimentation rate was 6 mm. per hour. The serum

cryoglobulin was negative. The cold agglutination was 1:32. An electrocardiogram revealed generalized flatness of the T waves with definite ST segment

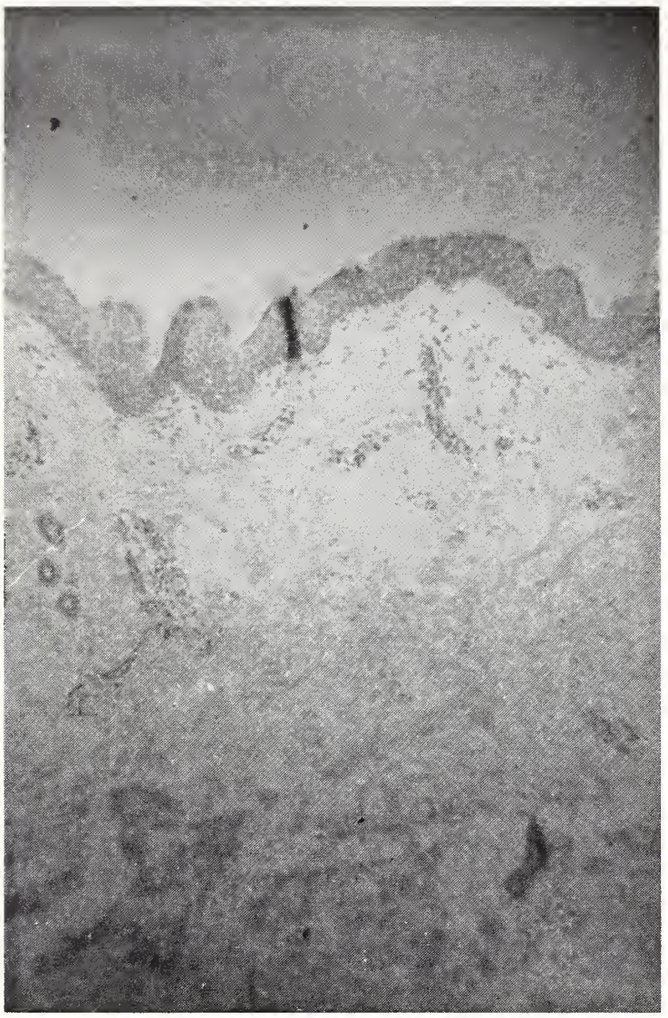


Figure 4 is a skin biopsy showing thickened disrupted collagen tissue, decreased dermal appendages and diffuse tissue edema. Note hyperkeratosis.

depression in V4, 5, and 6. X-rays of the chest, upper gastrointestinal series, gallbladder and cervical spine were all within normal limits. Flecks of calcium were described in the soft tissues of the terminal phalanx on the fourth left finger. A skin and muscle biopsy was taken from the calf of her left leg and was diagnosed as revealing the classical changes of scleroderma (Figures 4, 5, 6).

Before proceeding with a cervical sympathectomy, medical therapy was attempted in the treatment of the Raynaud's phenomenon and skin gangrene. Neopavrin, Vasodilan, and Priscoline were given four times daily. This medication seemed to have no influence on the incidences of vasospasm. Intramuscular heparin was begun in dosages of 50 mg. I.M. every six hours. Within three days after beginning anti-coagulation, there was dramatic decrease in the incidence and severity of the Raynaud's phenomenon. The patient was placed on Coumadin and Priscoline. Gloves were to be used as much as possible, and she was to avoid any type of unnecessary cold exposure.

Four days after discharge the patient again developed severe vasospastic symptoms of both upper extremities. The anticoagulant was maintained at two and one-half times the control tests and the vasodilating preparations were used in high dosages. The symptoms seemed to increase in severity and frequency. Because of her continued distress and the presence of gangrene of the fingers, it was thought necessary to perform a bilateral cervical sympathectomy. This was done in a two stage procedure over a two week period. Immediately following the sympathectomy, the appropriate upper extremity was free of symptoms and had the appearance of warm, flushed, but still dry, skin.

It is of interest to note that during the hospitalization for the sympathectomies, a repeat electrocardiogram revealed flat T waves in AVF and V5 and 6, with inverted T waves in V2, 3, and 4. There was ST segment depression in AVF, V4, 5, and 6. The laboratory findings were otherwise unchanged.

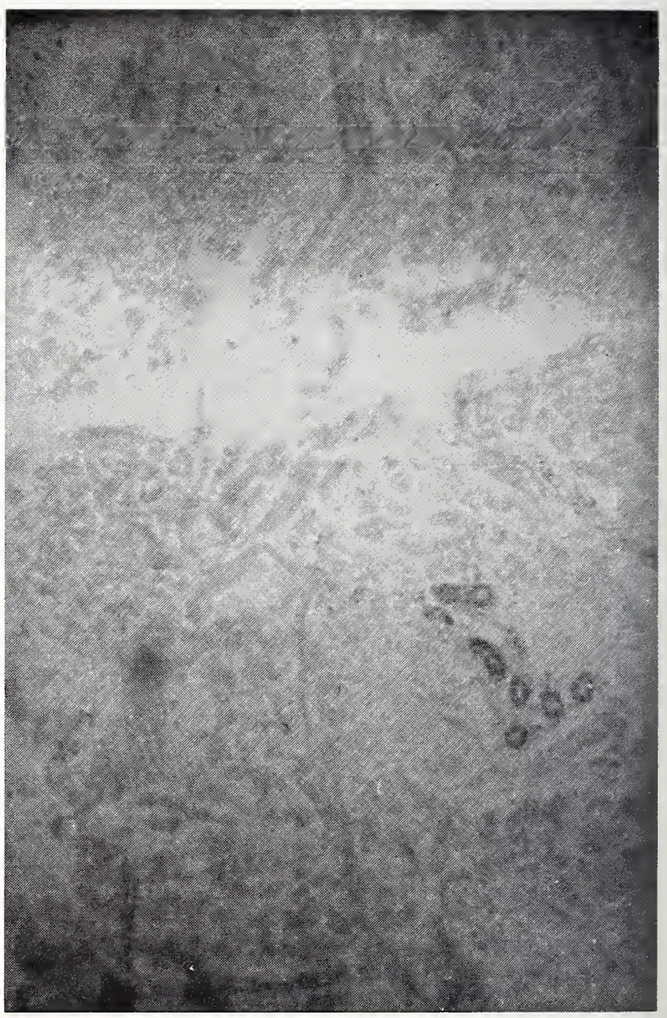


Figure 5 reveals thickened, disrupted, edematous collagen tissue with deeply located sweat glands.



Figure 6 is a muscle biopsy, showing variations in the thickness of the muscle fibers with loss of striations and increased cellularity.

After surgery the patient was followed at intervals with considerable improvement for the next three months. The patient described no more episodes of vasospastic phenomenon in either hand, though she did occasionally note some blueness of her fingers. The gangrenous skin of the left hand had gradually been replaced with normal-appearing skin without any evidence of scar formation. On Aug. 1, 1961, she complained of hard deposits in the tips of the fingers of both hands, which had been present for about four weeks. These were irregularly outlined, raised, hard, whitish areas that seemed to be within the skin itself. One of the larger areas was incised, and a milky, flaky, thin fluid was expressed. It was thought that this condition represented calcinosis cuti. The uric acid was 4.6 mg. per 100 ml., and the serum calcium was 10 mg. per cent per 100 ml. At this time the patient complained of no evidence of vasospasm. No specific therapy was given to the calcium deposits of her hand. By March 21, 1962, all of the calcium deposits had disappeared, and the skin of her fingers appeared perfectly normal to gross inspection.

The patient was followed until Aug. 28, 1962, at which time she was having no symptoms of Raynaud's phenomenon, or pain of either upper extremities. Repeat studies have not been performed to evaluate the systemic involvement since the initial hospitalization.

This patient represents the classical clinical picture of rather early involvement with progressive systemic sclerosis. The main manifestation was the presence of skin involvement and Raynaud's phenomenon. The development of calcinosis cuti was an interesting manifestation of her disease and did not require any specific therapy. The cause of the appearance of the calcium deposits of the skin is not recognized. The use of sympathectomies as the therapeutic aid and treatment of Raynaud's phenomenon in scleroderma is generally discouraged since it seems to offer only temporary relief of the symptoms. In this particular case the procedure was thought mandatory because of the presence of the skin gangrene and the rapidly increasing episodes of vasospasm. This patient seemed to obtain continued relief from the sympathectomy during the two years postoperatively. This case again shows the failure of the various vasodilating preparations and anticoagulation to control the vasospastic symptoms. Though there was no demonstrable visceral involvement, it was felt that the electrocardiogram was definitely abnormal and might well represent early myocardial involvement.

CASE REPORT 3

This 39-year-old white female was first seen in January 1963. Her complaint was that of pain in the left facial region, left shoulder and arm, of about two years' duration. The pain had started very suddenly at first in the left supraclavicular fossa region. Gradually the pain spread over the entire left side of the face, across her shoulders, and into the left arm and left hand. Over the past six months, the right shoulder, right arm, and right hand had also become involved. The pain was described as a tearing, sharp sensation, but at times there was paresthesia and a burning discomfort. She had definitely noticed that the weather influenced her pain considerably. In warm weather the pain almost disappeared, only to return in the cold season. She had noticed that her hands were extremely pale at the time of the paresthesias and pain. Over the past six or eight months, she had noticed a similar type of phenomenon involving her feet. Over a five year period, her skin and hair gradually developed a diffusely dry, scaly, rough appearance. She described no dysphasia or other symptoms referrable to the gastrointestinal tract. She related no cardiovascular symptoms. There was no pronounced dyspnea, but she stated that in times of increased nervousness, she would experience hyperventilation. Over the past few months, the patient had noticed some decrease in her ability to make decisions and felt that her "thinking was slower." She experienced increased nervousness over

the past two years which was attributed to the continuation of the pain. Her medical history was completely negative otherwise.

Physical examination revealed a blood pressure of 110/80. She was an asthenic, well-developed, well-nourished white female, who was in no obvious acute distress. She did complain of some discomfort over her left shoulder and hand at the time of the examination. The skin was diffusely dry, but was not bound unusually to the underlying tissue. There was minimal nonpitting swelling of the skin of the hands, ankles, and feet. There were areas of depigmentation noted. Neck examination was completely normal, without any appreciable pain upon rotation of the head. The pain she described could not be reproduced by pressure over the brachial plexus. Neurological examination was completely negative. She had no palpable change in the skin temperature of her hands or feet. The heart and lungs were normal. No hepatosplenomegaly could be detected. The peripheral vasculature was normal with bounding and equal pulses in all extremities. There were no apparent nail changes.

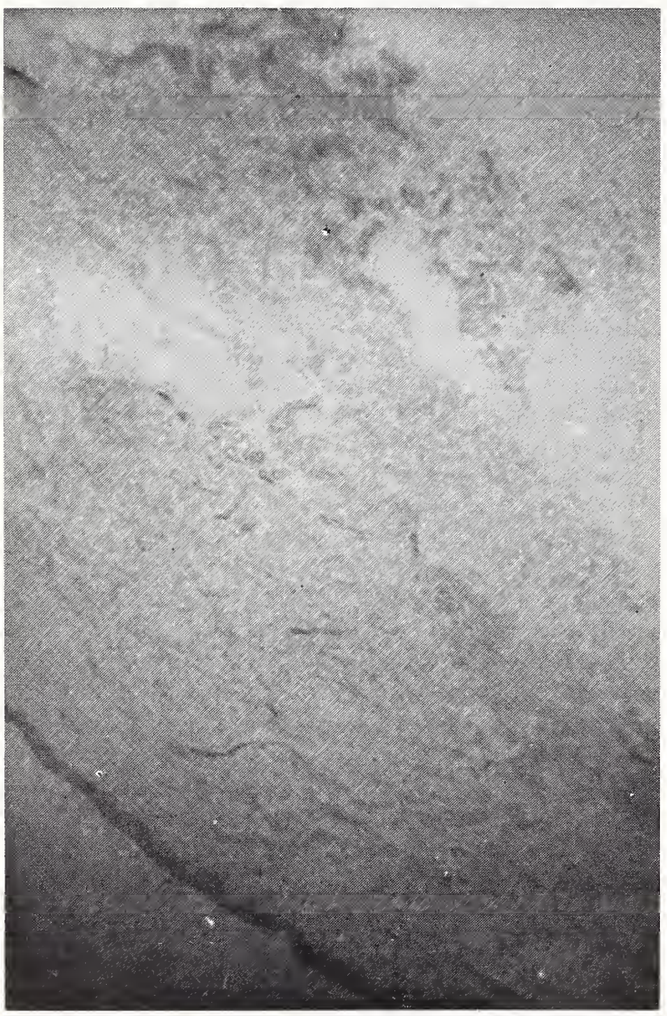


Figure 7 reveals involved skin revealing a paucity of dermal appendages. The few seen are located deeply. There is edema and disrupted collagen.

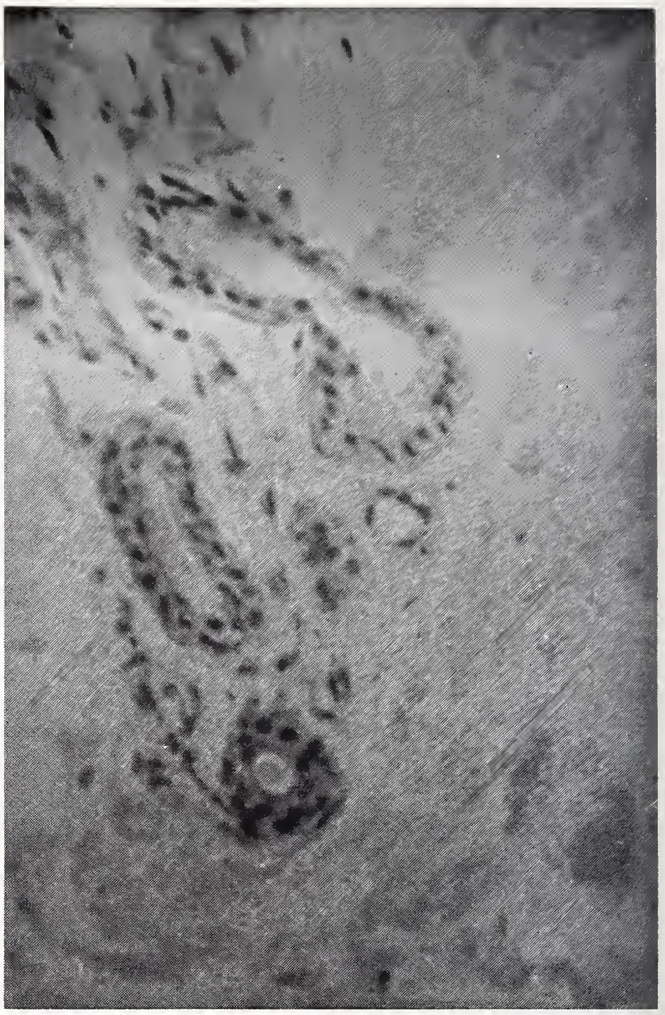


Figure 8 reveals thickened sweat glands surrounded by a rim of hyalinized tissue and disrupted collagen tissue.

In the laboratory, the urinalysis was normal with a specific gravity of 1.024. There were 8 to 10 white blood cells per high powered field on a noncatheterized specimen. The hemoglobin was 12.6 gm. with an hematocrit of 37 vol. per cent. The total white count was 6,300. The differential was within normal limits. The blood urea nitrogen was 12.5 mg. per 100 ml. A fasting blood sugar was 93 mg. per 100 ml. The total protein was 6.8 gm. with a 4.8 albumin and 2.0 globulin. The serum cholesterol determination was 225 mg. per 100 ml. The PBI was 4.8 mg. per 100 ml. The blood smears for L.E. cells on two occasions were negative. The VDRL was nonreactive. The sedimentation rate was 24 mm. per hour. A uric acid determination was 4.1 mg. per 100 ml. The chest x-ray was completely negative, as was an upper gastrointestinal series, a colon study, and a gallbladder x-ray. Intravenous pyelography failed to reveal any abnormality. A cervical spine x-ray revealed perfectly normal alignment, without any evidence of degenerative disc disease or arthritis. No spurs could be seen on the lateral projection.

A muscle and skin biopsy was taken from the posterior left calf area. Microscopic examination revealed a thin epidermis. There was a loss of rete ridges of the epidermis and a striking paucity of the dermal appendages. There were a few remaining sweat glands situated deep within the dermis. Sebaceous and follicular tissue was noticeably absent. A pink-staining hyalin material was observed in the region of some of the sweat glands and also around the smaller blood vessels. There was an area of deep-

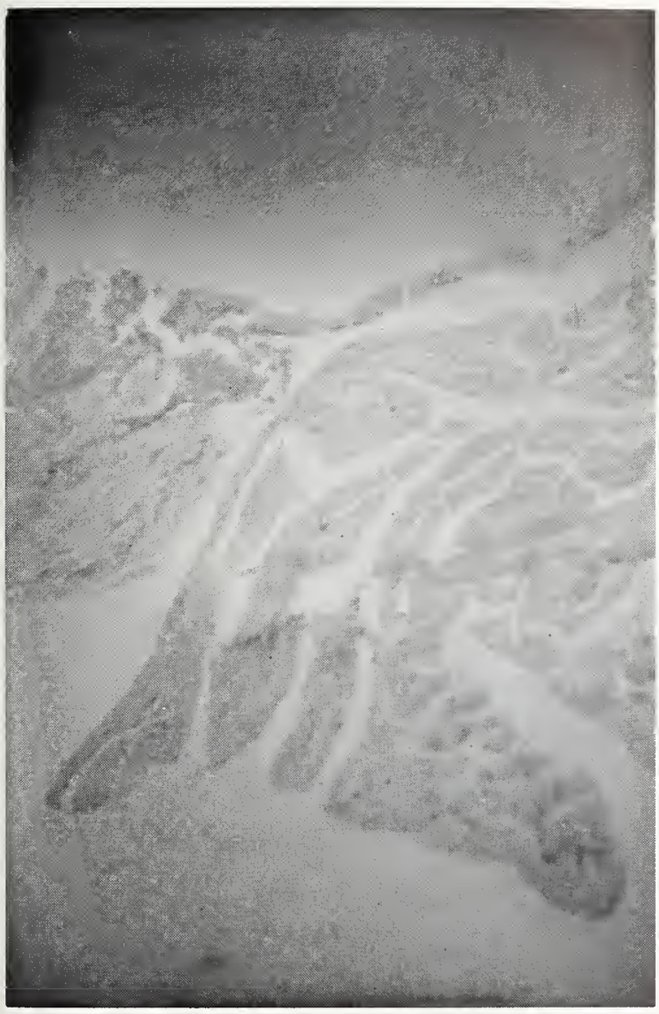


Figure 9 is a photomicrograph of muscle tissue revealing the increased cellularity with loss of striation and the varying widths of the muscle bundles.

ly acidophilic staining material just beneath the dermis which simulated amyloid deposition. The collagen tissue was markedly thickened and disrupted. Sections of the muscle tissue revealed cloudy swelling and haziness of the normal striations (Figures 7, 8, 9). These changes were thought to be classical of the late cutaneous manifestations of scleroderma.

The patient was treated with muscle relaxants, sedatives, and cervical traction. Hydrophilic ointment was given to help the dryness of the skin. The necessity of refraining from exposure to cold temperatures was stressed repeatedly. It was suggested that she keep her house warmer than usual and that she wear gloves as much as possible to prevent the vasospastic attacks.

This patient exhibits probably the most common form of scleroderma. From the studies it was concluded that the disease had not yet progressed to the point of diagnosable visceral involvement. Cervical sympathectomy was considered, however, it was decided to postpone this procedure until more severe and progressive symptoms had occurred. Other therapeutic aids will of course be tried as her symptoms progress.

SUMMARY

Scleroderma is a collagen disease, having not only skin, but systemic manifestations. The etiology is not yet known. The prognosis is extremely variable and unpredictable. There is no treatment known to be effective.

Three case reports are presented, which exhibit many of the varied problems encountered in the course of progressive systemic sclerosis. ★★★

308 Fulton St.

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THE HIGH LIVING HOGS

Hogs, along with humans, are making the move from rural areas to cities and their suburbs. The latest swine census shows 18,948 pigs living in the Chicago area alone. The trend is nationwide, and many champion porkers this fall will seem like apartment dwellers compared with their country cousins. Swine experts at the University of Illinois School of Agriculture said the move makes sense, because the hog, being really a sensitive and relatively smart animal, does not like mud-wallowing at all. These "new hogs" live close together, gobble new high-pressure feeds, and have trim lean lines, so that they yield the kind of relatively fat-free ham and bacon that diet-conscious humans prefer. The hitch in all this is that the pigs, like all city dwellers, show a higher rate of ulcers. In a study of 1,000 pigs, researchers found twice as many cases of ulcers as in the heyday of the "root hog, or die" era. Experts universally blame the ulcers on the stress of citified living. Said one, "They live like you and I, and have social problems."

Case Report IX of the Maternal Mortality Study: Hemorrhage Following Delivery of Twins

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Case No. 341-09550-62 entered the hospital at about 2:30 a.m. and the first of twins was delivered around 7 a.m. She had only been seen twice by her attending physician for prenatal care, coming for her initial examination during the seventh month. About 20 minutes after the delivery of the first baby, the patient began to bleed profusely, and the other twin, a stillbirth, was delivered by breech extraction. The patient continued to bleed profusely and despite administration of blood and oxytocics, she expired four hours after delivery of the first twin. The findings of the Committee on Maternal and Child Care are discussed in this report.

THE FOLLOWING CASE was selected to illustrate the difficulties which may arise in the delivery and immediate postpartum care of a patient with twin pregnancy.

CASE NO. 341-09550-62

A 22-year-old colored female, gravida 1, para 0, entered the hospital about 2:30 a.m. She began having rather hard contractions about 5 a.m., and at that time was given 75 mg. Demerol and 25 mg. Sparine. The patient had been seen twice by her attending physician for prenatal care, coming for her initial examination during the seventh month. At that time a complete examination including a pelvic examination was performed. The patient did not receive any examinations or treatment elsewhere.

About 7:00 a.m. the patient was first seen by the attending physician, and within a short time the first of twins was delivered. It was a normal cephalic birth with no complications. About 20 minutes later the patient began to bleed profusely. The membranes were ruptured, and the other twin was delivered by breech extraction. The actual time taken for the delivery was brief, and the placenta delivered immediately. This baby was a stillbirth.

Following delivery of the second twin, the patient continued to bleed profusely, and saline was started while waiting for blood to be typed and cross matched. The patient was given Ergotrate, intramuscularly and intravenously, and a Pitocin drip to try to make the uterus contract. This was relatively ineffective. Three pints of O positive blood were available which, although inadequate, were given while more blood was ordered from the nearest blood bank, 40 miles away. Following the initial transfusion the patient was given a large bottle of dextran and a large bottle of saline intravenously. At this time the patient was in shock and in such poor physical condition it was felt that a hysterectomy would not be successful. Eventually, the ordered blood arrived and was started, two pints at a time, but the patient expired approximately four hours after delivery of the first twin.

Preventive medicine member, Committee on Maternal and Child Care.

CASE REVIEW

This case was reviewed by the Committee on Maternal Child Care at its regular quarterly meeting and the following evaluations made:

I. Adequacy of data. The data obtained in this case were rated 3 on a scale of 1 (minimal) to 5 (completed data sheet, relevant explanatory note, and autopsy report).

II. Cause of Death. This death was considered to be a direct obstetrical death due to hemorrhage from

postpartum uterine atony (uterine inertia). No autopsy was performed.

III. Avoidability. In ascertaining avoidability, the committee, following the AMA guide for maternal death studies, assumes (1) that the physician possessed all of the knowledge currently available and relevant to the factors involved in the cause of death, (2) that he had a high level of technical ability by experience, and (3) that he had available to him all the facilities present in a well-organized and properly equipped hospital. It is realized that these are extremely strict criteria, and a majority of maternal deaths occur under far less desirable circumstances. However, if maternal care is to be improved, high standards must be maintained. Therefore, on this basis, the committee felt that this death was avoidable.

IV. Factors of Avoidability. If a death is considered avoidable, the committee attempts to assign factors of avoidability to the physician, hospital, patient, or to a combination of these. In this case the committee felt that avoidability should be assigned in two of these areas. There was a real question from the record as to whether a diagnosis of twin or multiple pregnancy had been made prior to admission to the hospital and whether adequate facilities were available in the hospital for dealing with this kind of obstetrical emergency. Finally, professional judgment was involved in regard to the management of serious postpartal hemorrhage.

DISCUSSION

The committee considered this to be a direct obstetric death due to hemorrhage caused by postpartum uterine atony. More adequate clinical information and particularly the performance of an autopsy might have been of considerable help in this evaluation. In addition, there was no report of any laboratory procedures, i.e. serology, hemoglobin, urinalysis, or other tests. There was no mention of toxemia or edema during the prenatal period or the hospital stay.

This patient's problem started with the twin pregnancy. Guttmacher and Kohl[1] studied 1,327 pairs of twins and noted that in 37 per cent one presented by the vertex and the other by the breech; in 47 per cent both were vertex; in 9 per cent both were breech; and in the remaining 7 per cent various combinations of presentations were found, including transverse lies. With these potential complications the first and most important thing is to make a diagnosis of multiple pregnancy. Subsequent planning must then include the needs of both mother and infants—which are likely to be premature. During pregnancy twins may be strongly suspected on clinical examination, and the diagnosis should be confirmed by x-ray. Even if the diagnosis of multiple pregnancy has not been made during pregnancy, an attempt should be made to establish this when a patient enters the hospital. If the presence of two infants is shown, the patient should be typed and cross matched for at least 1,000 cc. of blood because of the possible danger of hemorrhage. Adequate anesthesia and facilities for prompt resuscitation of the infants should be available at delivery.

It is difficult to reconstruct exactly the events of delivery in this case. Presumably the placenta of the second twin separated prematurely, leading to profuse bleeding. This actually occurred at about the optimum time for delivery of the second twin—10 to 20 minutes after the first. Delivery was performed promptly, but apparently not quickly enough to save the life of the second baby. It would have been interesting to know the condition of the second baby's placenta.

When the patient continued to bleed after delivery, blood and oxytocics were given immediately and appropriately. Further blood was ordered, but it was apparent that the difficulty of obtaining blood from a distant bank was a serious problem in this case. Apart from this, when the patient continued to bleed, thorough and adequate exploration of the uterus and lower uterine segment was made. It is still possible, however, that an unexpected laceration of the uterus was present. When bleeding continued, even in the presence of inadequate blood for replacement, insertion of an intrauterine pack should have been strongly considered. While this may give a false sense of security, it is, at least, of temporary value and in a case such as this might have given sufficient time for the blood to arrive. Finally, all other measures being ineffective, a hysterectomy should have been considered, even if the patient's condition was poor. Certainly, without a hysterectomy she did not survive and, therefore, control of bleeding by ligation of the arteries to the uterus (possibly the internal iliac arteries) with subsequent hysterectomy might have been life saving. In addition, the situation was an appropriate one for the use of intra-arterial transfusion: in these cases a small amount of blood given into the iliac artery may be far more effective than large amounts given into a peripheral vein. An additional point of importance is that in case of profuse postpartal bleeding the ability of the blood to clot should be closely observed at regular intervals. Where fibrinogen deficiency appears to be present, fibrinogen should be given promptly.

SUMMARY

A maternal death is described in which postpartal hemorrhage occurred, probably due to uterine atony, after the delivery of twins.

The diagnosis of multiple pregnancy can and usually should be made during pregnancy. This enables adequate planning to be carried out in anticipation of the complications which may arise during delivery, in the care of the premature infants and in the postpartal period.

Complicated obstetrical cases, such as those of multiple pregnancy, require admission to hospital and adequate facilities for giving anesthesia and providing replacement of blood and possibly fibrinogen.

When severe postpartal hemorrhage occurs, adequate replacement transfusion, oxytocics, and exploration of the uterus to rule out lacerations of the cervix and lower uterine segment are necessary. Facilities for emergency hysterectomy are essential. ★★★

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CLERGICAL EXPOSURE

Summoned by a woman taken suddenly ill, the clergyman answered the call but was somewhat puzzled, for he knew that the woman was a devoted worker in another church. While waiting to be shown to the sick room, the pastor chatted with the little girl of the house.

"It is very gratifying to know that your mother thought of me in her illness," he said. "Is your minister out of town?"

"Oh, no," answered the child. "He's home. We just thought it might be something contagious—and we didn't want to take any risks."

—*English Digest*

Anesthesia Experiences in Geriatric Patients

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The anesthetic charts of all patients age 70 and over undergoing surgery at the University Medical Center and Veterans Administration Hospital, Jackson, Miss., between July 1, 1958, and June 30, 1962, were reviewed. The anesthetic procedures and drugs were tabulated. The importance of preoperative work-up and postoperative care as well as anesthetic management is discussed.

IN RECENT YEARS surgery has extended its boundaries considerably, and surgery in the elderly person has become one of the new frontiers. It is therefore necessary that anesthesia investigate this frontier to determine the problems involved and, in so far as possible, arrive at the best methods of solving them. Relatively, there are few reported series dealing with anesthetic experiences in the geriatric population. Frequently, the ones available are difficult to compare because of the different methods of study and the different interests involved. Controlled studies are almost nonexistent. The work available, however, does reflect a considerable interest in this field.

We are reporting our series to contribute whatever it may to the data already available. Our methods of studying geriatric anesthesia are standardized no more than those already reported. Indeed our method of anesthesia for the geriatric patient is not standard. We attempt to manage each case as an individual anesthetic problem and apply the best method and agent to it that our experience and familiarity affords.

STUDY METHODS

This report is a review of the charts available for anesthesias administered to patients age 70 years and older between July 1, 1958, and June 30, 1962, in the University of Mississippi Medical Center and the Veterans Administration Hospital in Jackson, Miss. This age limit was arbitrarily selected because most patients are undergoing the physiological changes associated with geriatrics by the time they have reached this chronological age. This is a point of variance in other studies. Some groups have set the age limit much lower than this, especially in the earlier reports. However, we feel that we see a fair number of people in the seventh decade that are not truly physiologically geriatric patients.

We have counted the total anesthetic experiences instead of the total number of patients. All cases, private or charity, in which the anesthesiology department has been asked to participate have been used, including local stand-by anesthesias. We have included these because there has been a question as to whether a non-traumatic general or regional anesthesia is tolerated better than a local. We feel that a very sick heart tolerates an inadequate local anesthesia poorly, especially if there is an element of mental confusion and an inability to understand and cooperate. It is also necessary that a local agent be removed from the system either by excretion or detoxification. This may be a problem if large quantities of local agents are injected into patients that have impaired hepatic or renal function.

The residents did most of these cases under the supervision of the staff. A small percentage of them were done by nurses and by private anesthesiologists. Our data came primarily from our punch card anesthetic record system. The deaths were taken from the hospital death files, and the charts and autopsy reports were studied on these patients.

The routine preoperative work-up required on all patients prior to induction of anesthesia in-

From the Department of Anesthesiology, University of Mississippi School of Medicine.
Read before the 18th Annual Session, Southern Society of Anesthesiologists, Gatlinburg, Tenn., May 4, 1963.

cludes history and physical examination, complete blood count, urinalysis, blood urea nitrogen, blood sugar, chest x-ray, and electrocardiogram. The attending physician and/or anesthesiologist orders other studies that are deemed necessary.

TOTAL ANESTHESIAS

There was a total of 1,164 anesthesias administered to this age group during this period. The agents and techniques included spinal, peridural, halothane, cyclopropane, barbiturate-nitrous oxide combinations, regional block, and local infiltration. Ether and ethylene were used infrequently.

Conduction and inhalation techniques were about evenly divided, conduction anesthesia being used 592 times and inhalation anesthesia being used 572 times.

Approximately one-half of these patients were in the age group 70 through 74 years. This group may be accentuated some by the fact that the older World War I veterans are just now reaching this age group. Approximately one-fourth of the patients were in the 75 through 79 age group, 14.3 per cent in the 80 through 84 age group, 5.4 per cent in the 85 through 89 age group, 1.6 per cent in the 90 through 94 age group, 0.8 per cent in the 95 through 99 age group, and 0.26 per cent in the 100 plus age group. The oldest patient was 106 years.

The first table, showing the per cent of patients in each age group and the distribution of conduction anesthetic techniques by age groups, indicates that age alone did not significantly influence selection of the conduction technique.

TABLE 1

PER CENT OF TOTAL ANESTHETIC PROCEDURES IN EACH AGE GROUP. THE TOTAL NUMBER OF CONDUCTION ANESTHETIC TECHNIQUES IN EACH AGE GROUP

Age	*% Patients in age group*	*Spinal*	*Nerve block*	*Peridural*
70- 75	50.6%	240	30	17
75- 80	26.9%	125	20	15
80- 85	14.3%	61	14	10
85- 90	5.4%	34	3	6
90- 95	1.6%	8	2	1
95-100	0.8%	3	1	1
100+	0.3%	1	-	-
Totals		472	70	50 = 592

Table 2 depicts the distribution of inhalation agents by age group and again suggests that age alone did not significantly influence selection of agent.

TABLE 2

TOTAL NUMBER OF TIMES EACH INHALATION AGENT WAS USED ACCORDING TO AGE GROUP

Age	*Halothane*	*Cyclopropane*	*Barb. Nitrous*	*Ether*
70- 75	182	77	41	3
75- 80	97	39	14	4
80- 85	58	18	4	-
85- 90	6	11	3	-
90- 95	5	2	1	-
95-100	1	3	-	-
100+	1	1	-	-
Totals	350	151	63	7 = 571

The anesthetic techniques are classified according to risk in Table 3. They were broken down into five groups with emergency subgroups, using the American Society of Anesthesiology classification. Only 4.1 per cent of these cases were put in class 1. There were no patients classified as 1E. Category 2 contained 42.7 per cent of the total, and 3.1 per cent of these patients were emergency patients. Category 3 had 37.2 per cent of the total, and 6.5 per cent of these were emergencies. Category 4 had 12.8 per cent, and 5.7 per cent of the total were Class 4 emergencies. Only five patients were classified as Class 5E. When the expected number of anesthesias calculated by per cent are projected with those actually done, the selection

TABLE 3

PER CENT OF TOTAL ANESTHETIC PROCEDURES CLASSIFIED ACCORDING TO RISK. TOTAL NUMBER OF CONDUCTION TECHNIQUES IN EACH RISK GROUP

Risk	*% Patients in risk group*	*Spinal*	*Nerve block*	*Peridural*
1	4.1%	29	1	1
2	39.6%	198	17	16
2 E	3.1%	18	2	2
3	30.7%	150	16	9
3 E	6.5%	31	8	4
4	7.1%	26	8	9
4 E	5.7%	18	9	5
5	.4%	1	1	1
5 E	2.5%	2	8	5

of the agent appears to have been influenced by the risk.

Table 4 shows the distribution of inhalation agents according to risks.

TABLE 4

TOTAL NUMBER OF TIMES EACH INHALATION AGENT WAS USED ACCORDING TO RISK CLASSIFICATION

Risk	*Halothane*	*Cyclopropane*	*Barb. Nitrous*	*Ether*
1	7	7	3	-
2	148	50	32	-
2 E	8	6	1	-
3	128	37	13	5
3 E	14	16	2	1
4	20	12	6	-
4 E	22	10	2	1
5	1	1	-	-
5 E	2	11	4	-

In classifying these patients we assumed that their age alone did not increase the risk. However, this may well not be a valid assumption because of the subtle changes that occur but may not be detected by routine examinations and laboratory reports. For instance, it has been observed on postmortem examinations[1] (Howell and Piggott of London) that atherosclerosis does not uniformly affect all of the arteries. The peripheral arteries do not accurately reflect the condition of the aorta, renal, cerebral, and coronary arteries in a significant per cent of the cases. It is not possible to determine accurately the degree to which the elastic tissue of the body has been replaced by fibrous tissue. We routinely accept the idea that the physical reserves are diminished with old age, which would increase the surgical risk. The extent of myocardial atrophy due to various causes is difficult to assess.

SURGICAL PROCEDURES

The surgical procedures include most of those expected in a younger group. However, surgical problems considered to be peculiar to old age, such as prostatic resections, repair of fractured hips, and surgery for vascular insufficiency, have a much higher incidence in older people. They accounted for almost one-half of the total anesthesias. Spinal anesthesia is suitable for many of these commonly occurring geriatric operations, and this partially accounts for its frequent use in our series.

Short-acting muscle relaxants were used in approximately one-third of these patients. They were used most often during intubation. When used for relaxation during the procedure both the intermittent injection of a small amount of relaxant and the slow continuous drip method were used. This study did not relate any significant complications to either technique. Postoperative apnea was considered a problem in less than 2 per cent of these patients. Relatively smaller doses of relaxant were utilized in this age group. The long-acting nondepolarizing agents were used in less than 5 per cent of the patients in whom relaxants were used.

Intubation is done more often in this age group than the younger age groups when general anesthesia is used. This is done because of the problem frequently encountered of fitting a mask to an edentulous, atrophic face, and the absolute necessity of maintaining an adequate airway at all times.

COMPLICATIONS

Chronic lung disease with retained secretions is a prevalent preoperative complication. Intubation provides good tracheobronchial toilet that might not be provided otherwise, at least during and immediately after surgery. Acetyl-cysteine is used during and after surgery to aid in the removal of these secretions.

The preoperative complications were more often multiple than single in these patients. The complications were those that would be expected in a geriatric population with the accompanying degenerative changes. Atherosclerotic changes in the cardiovascular system, chronic diseases of the lungs and urinary system were the most prevalent preoperative complications, as would be expected.

During the anesthesia a drop in systolic blood pressure of as much as 25 per cent of the preanesthetic blood pressure was considered significant. Most often this was a transient drop that occurred with spinal anesthesia and with the induction of halothane anesthesia. This is a difficult complication to assess because of the wide variety of influences to which it is susceptible. A drop in blood pressure out of proportion to the anesthetic agent administered prior to the time of blood loss may be a valuable signal that this patient has a contracted blood volume or a dangerously diminished cardiovascular reserve and thus alert the anesthetist to other related problems that may occur. Hypotension was, by far, the most common per-

operative complication. It was observed sometime during the anesthesia in 30 per cent of the group. Shock, arrhythmias, and bronchospasm occurred infrequently peroperatively. There were five deaths during anesthesia.

The postoperative complications were of about the same variety as one would expect in any adult population. However, pneumonia, atelectasis, cardiac decompensation, pulmonary emboli, acute myocardial infarctions, and renal complications were the most frequent. These complications may be related to the chronic changes found in geriatric patients and occur more often in this age group.

DEATHS IN SERIES

The deaths that occurred before the patients were discharged from the hospital were all counted. This system, of course, could be affected by many variables such as hospital policy and is open to criticism. However, it does suggest a continuity of the severity of the patient's illness and/or the complications, surgical, anesthetic, or otherwise. The time of death occurred from after the onset of anesthesia but prior to surgery in one case to more than 100 days postoperatively in other cases.

There was a total of 100 deaths in the series. This gives a death rate of approximately 8.6 per cent overall. Five of these patients died on the operating room table, three of uncontrolled hemorrhage and two from cardiac arrhythmias.

In our series, correlating death rates with anesthetic agent or technique does not reflect a difference in their relative safety. It does reflect our choice of a particular agent or technique on the basis of patient risk. We tend to use nerve blocks and local anesthesia in the extremely poor risk patient. If an inhalation agent was required, cyclopropane may have been selected. However, today there is a trend among this group to select halothane in the same situation that in 1958 would have dictated cyclopropane. This again does not mean that these are the only agents to use for these patients. It does mean that we feel that they are the safest and the best for our experience and ability. Ether may be considered the best agent for poor risk patients by some, and perhaps in their hands it is.

Local anesthesia still occupies a very important part of our total anesthesia program for geriatric patients. However, we think that the same care should be applied to the technique of administration, amount of agent used, and the selection of the patient for which it is suitable as we apply to other types of anesthesia. There is also an increasing trend to combine general analgesia with local anesthesia and a softening of attitude toward using general anesthesia in poor risk patients.

The death rate for all emergency surgery in this series is approximately 23 per cent, while that for elective procedures including the poor risk patients is 5.3 per cent. It is worth mentioning that 81.7 per cent of the patients in the class 4 category survived, 70 per cent in 4E, 80 per cent in class 5, and 37 per cent of those in class 5E. Provided these patients were properly classified, this lends support to an aggressive approach to these severe risk patients.

It is frequently difficult to determine the exact cause of death in these patients from the charts and autopsy reports. Multiple severe complications were often present, any of which may have been the final insult and all of which contributed to the final outcome of the case. The causes of death, as one would expect, are most often the same as those complications prior to surgery, namely, cardiovascular, pulmonary, and renal decompensation.

In examining the surgical procedures in the patients who died, no really important correlation could be found. Obviously, those procedures born of desperation would be expected to carry an increased mortality.

It is noteworthy that four of six patients with perforations of the intestinal tract expired. Five of eight patients with abdominal aortic aneurysm expired, and both of the patients with trigeminal nerve avulsions died of subdural hematomas. Two of eleven patients undergoing appendectomies died. Four of 14 patients undergoing open chest surgery expired. Five of 29 patients undergoing craniotomies expired, and four of 18 patients undergoing colostomies expired.

It is difficult to evaluate exactly the extent anesthesia contributed to these 100 deaths. Atelectasis and pneumonia occurred after the use of all the techniques. Those complications were frequently late complications that could not be related to the anesthesia. Aspiration pneumonitis was a pathological diagnosis which often did not occur until the anesthesia period was remote. It occurred then as a terminal event or as a complication of the comatose or very weak patient.

A review of the death charts did not reveal any clear-cut anesthesia deaths. Generally, these people were in poor condition prior to surgery and could not be expected to tolerate errors in anesthetic or surgical judgment.

The high incidence of pulmonary and cardiovascular complications deserves special consideration and poses some interesting questions. In these people with decreased reflex mechanisms and pulmonary reserve, prolonged tracheobronchial care becomes an absolute necessity. Atelectasis and pneumonia often occurred several days postoperatively.

Minor changes in the cardiovascular status deserve careful study. Blood volume is important not only as a preoperative and peroperative consideration but is equally important postoperatively.

After considerable soul searching and self-examination one must either accept or decline several challenges relating to the roll of the anesthesiologist in the team of physicians that must take an active part in the preoperative patient care and especially in the prolonged intensive postoperative care that these patients demand.

SUMMARY

The anesthesia charts have been reviewed for patients age 70 years and older. Age alone probably did not influence the selection of technique or agent, but the anesthetic risk did. The increased incidence of preoperative, peroperative, and postoperative complications seem to be related to the chronic changes associated with old age as would be expected. No deaths were attributed directly to anesthesia. The importance of preoperative, peroperative, and postoperative care with special emphasis on tracheobronchial toilet was discussed. The survival rate in the poor risk patient is encouraging and suggests that an aggressive treatment of these patients may be justified. ★★★

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THE FUTILITY OF DISCOVERY

"Whenever a new discovery is reported to the scientific world, they say first, 'It is probably not true.'

"Thereafter, when the truth of the new proposition has been demonstrated beyond question, they say, 'Yes, it may be true, but it is not important.'

"Finally, when sufficient time has elapsed to fully evidence its importance, they say, 'Yes, surely it is important, but it is no longer new.' "

—Michel de Montaigne, 1533-1592

Contemporary Inguinal Hernia Repair

R. B. WARRINER, JR., M.D.
Corinth, Mississippi

The use of nylon mesh in vascular surgery suggested its additional use in hernia repair. The author discusses his experience with the use of large weave Teflon mesh in the Cooper's ligament type of direct inguinal hernia repair. He concludes that this suture material should have a number of broader uses and recommends that it be employed more often.

THE EXPERIENCES of the surgeons of the past and the present can be tempered wisely with the knowledge of present day available materials to permit us today to still attempt to improve well-recognized surgical techniques. In 1958 vascular surgeons at the University of Mississippi were heard to discuss how they had used nylon mesh to form the framework of their tubular vascular grafts. After hearing that nylon in the tissues caused very little, if any, reaction, the author successfully used nylon in the Cooper's ligament type of direct inguinal hernia repair, in place of tantalum mesh.

Teflon mesh of large weave is a harmless adjunct to all hernia repair but specifically for often recurring direct hernia repair cases.[1] Surgery would like to promise 100 per cent cures in hernia operations; previously about 10 per cent recurred.[5] To lessen complications, to avoid the well-recognized pitfalls, and to reduce the recurrence rate, a study of the various methods of hernia repair was made, and it, through the years, demonstrates the difficulties encountered, and the step by step improvements.

SOURCES OF WEAKNESSES

To properly repair the abnormal protrusion through the abdominal wall first requires that one realize why the weaknesses are there and why they recur. The defects arise from three principle sources. Ferguson successfully repaired hernia with weaknesses at the internal inguinal ring.[2] His operation in children is still apparently 100 per cent effective. Bassini transplanted the cord between the external oblique and the internal oblique because he realized there was a weakness along the canal where the internal oblique muscle fibers and the transverse abdominal fibers intertwine into the conjoined tendon in the inferior border of Hesselbach's triangle. The Halstead operation corrects the third weakness in lower inguinal canal regions where direct hernia often appears. In this operation the conjoined tendon is brought down to Cooper's ligament, and the cord is left subcutaneously.

The Cooper's ligament repair described by Lotheissen in 1898[4] reinforces Hesselbach's triangle and thus corrects the anatomical defect, but it also recognizes and encompasses the corrections of the three previous operations. This type operation uses the rectus muscle fascia to close this triangle. Indirect hernias, if they recur, recur as such, if the sac was improperly handled at the first operation and if the internal ring was not closed tightly.[3] They will recur as direct hernias otherwise because the tissue used to close the weakness is pulled away from its source.[4] Of course, the direct hernia is due to a weakness in this area and so it would recur as a direct hernia. For this reason the Cooper ligament repair is recommended in both direct and indirect hernia and particularly when they are recurrent.

USE OF MESH

Tantalum mesh was used in difficult hernia operations in 1953[2] in order to bridge this gap over the entire weakened areas—around the cord at the internal and external canal openings and along

Read before the Alcorn County Medical Club, Corinth, Feb. 25, 1963.

the canal. Tantalum mesh, being metal, might be difficult to remove, and having sharp edges might cause some irritation. It does cause some increase in the infection rate; occasionally the metal has had to be removed because of a draining sinus.[2] A combination of the Cooper's ligament repair with the use of tantalum mesh repair is the operation the writer recommends except a plastic, Teflon mesh, is used instead of tantalum mesh, a metal. The use of nylon and Teflon mesh seems to be a natural. Nylon purchased from department stores was originally used and without complications. Teflon is more refined and has been used in 1963.

The mesh with large spaces seems to have advantages. This allows muscle to approximate muscle through the mesh, and fascia to approximate fascia through the mesh, and fibrous tissue to grow in and out of the mesh, and thus unites all three. This physiological principle is one of the most important points which this paper emphasizes. The synthetic mesh acts as if there were thousands upon thousands of tiny stitches reinforcing the fibrous healing. When the mesh is sutured along the edges the hernia cannot recur, certainly not through the mesh. Eventually the nylon may become brittle, but by that time the fibrous tissues should have healed and repaired the hernia weakness. In experiments on dogs and patients[1] the use of Teflon with large mesh, or open weave, bears out our contention and experience that the larger weave not only allows the tissue to approximate its opposite and heal more readily, but also if there is infection, drainage occurs readily and without surgical intervention.

OPERATIVE PROCEDURE

The usual hernia operation is performed with the cord and sac being carefully isolated. The sac is opened and the internal structures explored for additional hernia.[3] The closure would include double high ligation of the sac which could be anchored beneath the muscle if indicated. Black silk or cotton are most often used to close any weakness around the internal and external inguinal rings. This includes fixing the relaxed fascia in Cooper's ligament repair.

The mesh should be sutured in place carefully and snugly around the cord, both at the internal and external inguinal rings. To do this the mesh should be cut at each end in such a manner that the mesh can be placed under the cord with a portion of the mesh sutured again to itself on the opposite side of the cord. Since the mesh is nonirritating, it can lap up on the cord without complications. Infections should be especially guarded against. However healing seems to take place as well when the large mesh is used as when the mesh is not used.[1] In the author's experience there have been ten cases of inguinal hernia repair when nylon and Teflon mesh were used as herein described. There have been no recurrences to date and no infections, to our knowledge.

REVIEW OF LITERATURE

There apparently have not been many surgeons in America who would admit to the benefits of this type of surgery since, in 1960, only 174 cases could be documented.[4, 6, 7, 8, 9] This is understandable since the use of an artificial material might connotate lack of self-reliance in one's ability. Time and carefully kept records should settle this question. In the above mentioned 174 cases there were two with slightly infected hematomas, for a percentage of about 1 per cent.[6] There were two recurrences in the above mentioned series when the mesh was first used, and the edges were not sutured carefully in place.[9] This also was a 1 per cent recurrence rate, compared to an average 10 per cent. Today, even in elderly poor risk cases with large direct or indirect hernias, we have a useful crutch. After incising the cord and removing the testicle in the usual manner, Teflon mesh can be sutured over the approximated edges of the opening, and the closure rapidly completed. A small Penrose drain can be placed in the most dependent portion of the scrotum and left in place a day or two. This seems to eliminate the edema which appears due to the decreased amount of blood supply. In elective cases a patch-type skin test is performed to help eliminate the possible danger of allergy to the plastic material, even though to our knowledge no allergy to the plastic has developed.

SUMMARY

The advantages of Teflon are:[1]

—Teflon is inert and has the lowest tissue reactivity, thus allowing rapid healing.

—It retains its strength longer.

—There is no "cutting" or irritating effect.

—It may be sterilized by autoclaving repeatedly.

—Teflon fiber has zero moisture absorption and is the most nonwettable of all known fibers.

—The interlocked stitch used in the construction of the mesh allows it to be cut in any direction with no danger of fraying or raveling. It may be sutured near the cut edges.

—It combines strength with pliability which is not found in any other prosthesis.

Since Teflon mesh is such a harmless suture material, it is recommended that it be used more often, possibly to include closure of any postoperative hernia and even to add additional strength to any potential abdominal weakness. ★★★

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AN END TO BLACK EYES

Three New York City doctors, working with the New York State Athletic Commission, may end labored alibis for black eyes. They've brewed up a drug, buccal amylase (an enzyme) which in tests on 163 boxers with face injuries led to complete recovery without discoloration in 88 per cent of the cases. In a group of boxers with face injuries who were not given buccal amylase, only 10 per cent showed the good or excellent recovery observed in the group that got the drug.

Radiologic Seminar XIX: Mucocele of the Appendix

DAN T. KEEL, JR., M.D.
Brookhaven, Mississippi

OBSTRUCTION OF THE PROXIMAL appendiceal lumen, associated with continued active mucous secretion of the appendiceal mucosa distally, results in the development of a mucocele. As the cyst-like mucocele enlarges, it may project up into the lumen of the cecum and become the leading point of an intussusception. If rupture occurs into the peritoneal cavity, some of the mucous secreting cells may be implanted on the peritoneum, with the development of so-called pseudomyxoma peritonaei. Mucoceles are found in about 0.5 per cent of all surgically resected appendices and are most common in patients 35 years of age and above.

Symptomatology of the uncomplicated mucocele is usually rather vague, although intermittent, crampy right lower quadrant discomfort may be noted, along with vague dyspepsia. Melena, according to Elson,[1] occurs in 25 per cent of the cases. On physical examination a mass may be palpated in the cecal area.

Occasionally calcification will develop around the rim of a mucocele, and this may be detected on routine abdominal films. More commonly, however, the lesion is detected on a barium enema, producing a smooth bordered filling defect in the cecum. The appendiceal lumen, as one would expect, does not fill with barium. A specific radiologic diagnosis is often not feasible, and the differential diagnosis among other things must include carcinoma of the cecum, benign tumors such as a lipoma, inverted appendiceal stump, and appendiceal abscess.



Figure 1. Filled barium enema film showing smooth intraluminal cecal filling defect. In this instance the cecum is partially obscured by the rectosigmoid.

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, King's Daughters Hospital.

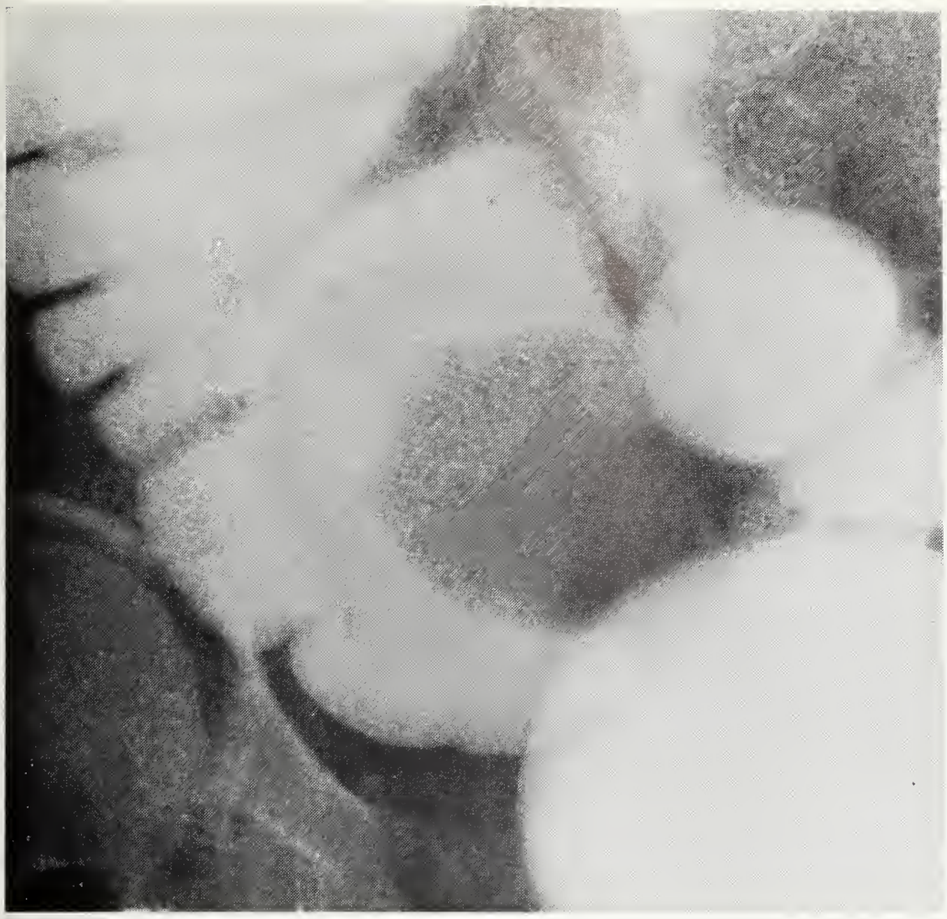


Figure 2. Spot film of cecum showing the lesion to better advantage.

The present case is that of a 61-year-old white female with recurrent crampy right lower quadrant pain. Work-up revealed an indefinite right lower quadrant mass and slight anemia. Barium enema showed a large smooth mass suggestive of a benign tumor which filled the medial portion of the cecum proximal to the ileocecal valve (Figures 1 and 2). Exploration was recommended, and at surgery a smooth, yellow, cystic mass was found in the region of the appendix. It was filled with a thick, tenacious white fluid and had a thick fibrous capsule. The pathological diagnosis was mucocele of the appendix. ★★★

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The author wishes to express his appreciation to Jack A. Atkinson, M.D., of Brookhaven, for supplying a portion of the clinical data.

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ONE MAN'S WAR

Successfully eluding puzzled police, a phantom "Enemy of Bureaucracy" has been busy wrecking Rome government offices at night with no apparent discrimination—ward precincts, the automobile license office, the statistical bureau, and even the University of Rome. He dumps papers all over the place, messes up files, and overturns desks. He never fails to call up the newspapers and the police after he has done the job. The police know his voice, but can never guess where he'll turn up next—there are so many bureaucratic institutions and he seems to hate them all.

Clinicopathological Conference XLV

Conducted by the Department of Pathology
University of Mississippi School of Medicine
Jackson, Mississippi

The patient in CPC XLV is a 37-year-old Negro female who apparently had hypertension, generalized arteriosclerosis, and renal disease, and subsequently developed a cerebral lesion that took her life. Dr. Forrest T. Tutor discusses the case, Dr. Robert Sloan presents the radiological data, and Dr. Joel Brunson gives the autopsy report.

THIS 37-YEAR-OLD colored female had been in good health until several months prior to admission, at which time she developed recurrent headaches. She had done well otherwise until five days prior to admission when she had a sudden onset of lower abdominal pain and weakness. Three days prior to admission she was admitted to her local hospital where she developed a paralysis of the right arm and leg and became unable to speak. A lumbar puncture was done at that hospital, and the spinal fluid was reported to be clear. The pressure or laboratory studies on this spinal fluid are unknown. It was felt that the patient's condition was deteriorating, and she was referred to the University Hospital for further evaluation and treatment. The patient was unaccompanied by relatives or friends, and no further history was available.

The admission examination showed blood pressure 210/110, pulse 120. She was stuporous, but responded to painful stimuli. There was no speech. When painfully stimulated, she would move the left upper and lower extremities but not the right. There was a right facial weakness of the central type. There was a questionable right Babinski sign. The abdominal reflexes were absent. The deep tendon reflexes were hypoactive on the right. One examiner thought that the patient might have a third nerve palsy on the right side. She appeared to appreciate pinprick on the left side of the body only, including the face. The neck was supple, and there were no signs of trauma to the body in general. There was a systolic murmur heard best at the apex. There were coarse rales heard bilaterally at the lung bases. The abdomen was soft, and no organs were palpable. There was a questionable mass in the mid lower abdomen.

On laboratory examination the hemoglobin was 10.4 gm., hematocrit 33 per cent, BUN 43 mg. per cent, chloride 97 mEq/L, CO_2 combining power 27 mEq/L, potassium 4.5 mEq/L, sodium 141 mEq/L. X-rays of the chest and skull were normal.

A bilateral carotid arteriogram was done on the day of admission, revealing extensive arteriosclerotic plaque formation in the carotid and cerebral vessels with occlusion of the left middle cerebral artery intracranially. There was a shift of the anterior cerebral arteries to the right. She was admitted to the ward following arteriogram about noon the day of admission. On admission on the floor, blood pressure was 150/110, respiration 20, pulse 86, temperature 98.6. Vital signs remained stable, and the patient's general condition was unchanged until 9 p.m. when she was found to be gasping for air and was apparently moribund. An endotracheal tube was inserted, and oxygen was given while closed chest cardiac massage was attempted. There was no blood pressure or pulse obtainable, and she was pronounced dead at 9:05 p.m. on Jan. 1, 1961.

DISCUSSION

Dr. Forrest T. Tutor: "The case today is that of a 37-year-old Negro female who apparently had hypertension, generalized arteriosclerosis, and renal disease, and subsequently developed a cere-

bral lesion that took her life. We don't know too much about this case; it seems to be a rather typical CPC case from this standpoint. We are told that she had had headaches for a few months prior to admission. These are described only as recurrent headaches. There was no localization and no type was mentioned. She apparently did well until five days prior to admission at which time she had a sudden onset of lower abdominal pain and "weakness." I don't know whether this is just weakness of the lower extremities or generalized weakness. This would be important to know.

"We are told that three days prior to admission she was admitted to her local hospital where she apparently developed a paralysis of the right arm and leg and aphasia. A spinal tap was done, and we are told only that the fluid was clear. This tends to go along with my belief that the spinal tap is probably the most neglected diagnostic study in our profession. This is not much information to get from a spinal tap. Then, because the patient apparently was deteriorating, she was transferred to the University Hospital.

"The patient arrived unaccompanied by relatives, friends, or notes from the referring physician. She was found to have a blood pressure of 210/110, and this, of course, is an unusual B.P. for a 37-year-old Negro female and must be interpreted as abnormal. Pulse at that time was 120. Apparently her temperature was not taken until later, and respirations are not mentioned.

"We were told that she was stuporous. This is a confusing term if it is not qualified in some way because this term means different things to different physicians. Even though the patient was aphasic and hemiplegic, it could have been stated whether she was able to follow simple commands, such as squeezing with her left hand, sticking out her tongue, or blinking her eyes. This would have established whether she was able to perceive stimuli on the sensory side, even though she did have a motor aphasia. So we really don't know what her conscious level was like. But she was hemiplegic and aphasic, and we are told that she had a right central facial weakness. This is, of course, quite important because it establishes the fact that the lesion is supra-tentorial and is on the left side of the brain. There was a questionable right Babinski sign. The abdominal reflexes were absent, and the deep tendon reflexes were hyperactive on the right side. All these are further confirmation that the patient did have a lesion in the left cerebral hemisphere that either involved the motor cortex or its radiation, the internal capsule, and Broca's area for speech.

"To further confuse the matter, some examiner thought that the patient might have a third nerve palsy on the right side. In order for a patient of this sort to have a third nerve palsy on the right side, there would have to be a mass lesion on the left side that was displacing the brain stem to the right catching the third nerve between the brain stem and the free edge of the tentorium on the right side. A patient can have a third palsy on the side opposite to a mass lesion, but the patient will usually have signs of pyramidal tract involvement on the same side as the lesion because the pyramidal tract is pressed against the free edge of the tentorium above the level of the decussation of the pyramidal tract. The third nerve and the paralysis were on opposite sides so I tend to agree that this was questionable. We are told that there was a lack of appreciation of pain on the right side. This is important because this suggests a lesion involving the thalamus. Pain perception takes place at the level of the thalamus. This would go along with a lesion involving the internal capsule. She apparently had no nuchal rigidity suggesting that there was no subarachnoid hemorrhage present. This would go along with the clear spinal fluid obtained and would be further evidence against a cerebral hemorrhage.

"We are told that there was a systolic murmur heard best at the apex of the heart. There were coarse rales at the base bilaterally which may have meant that the patient was in some degree of cardiac decompensation. The abdomen was soft and no organs were palpable, but then in the next sentence we are told that there was a questionable mass in the mid lower abdomen. This questionable mass could mean anything from a full bladder to an aortic aneurysm. I think we will have a few words to say about that later on.

LABORATORY DATA

"The laboratory results did not help us too much. A mild anemia and an elevated BUN were found. X-rays of the chest and skull were made, and these were reported as being normal. I am a little bit surprised at the chest x-ray being reported as normal because I would expect there to be at least some left ventricular hypertrophy if this is a long-standing hypertension. If there is truly no left ventricular hypertrophy, this would be important because this would probably mean that this is an acute hypertension.

"Bilateral carotid arteriograms were done on the day of admission, and we are told that these

revealed extensive arteriosclerotic plaque formation in the carotid and also in the cerebral vessels. Here again, it is highly irregular for a 37-year-old individual to have this amount of arteriosclerosis even in the carotid artery and even more so, of all the cerebral vessels. This would suggest that this is a long-standing hypertension if she has this much generalized arteriosclerosis. Generally speaking, generalized arteriosclerosis is associated with cerebral arteriosclerosis, but this is not always true. If this is long-standing hypertension, as I think it probably is, it will better fit this case. There was an occlusion of the left middle cerebral artery—intracranially. If this is a total occlusion I think we have to assume that this is blocked off by something inside the lumen. It is possible to have a tumor that will press on the intracranial vessel to occlude it, but this is rather unusual. If my assumption is correct that this girl had a sudden onset of this hemiplegia and aphasia, this is certainly strong evidence for a vascular lesion and against a mass lesion.

"She was admitted to the floor following the arteriogram. When she arrived on the floor her blood pressure, at least the systolic B.P., had fallen some; the diastolic was still the same. The pulse had also fallen from 120 to 86. Here we are told that her temperature was normal. This fall of the systolic blood pressure, decrease in pulse pressure, and the fall of the pulse may well mean a beginning decompensation of the brain stem from increased intracranial pressure that is present. Further evidence of this is that this patient did not live much longer—only about nine hours to be exact. At that time she was found to be gasping for air and was apparently moribund. This gasping for air could either be that, being comatose, the patient let her tongue fall back giving respiratory obstruction or it could be simply a terminal respiratory gasping. An endotracheal tube was inserted, oxygen given, and closed chest massage administered without benefit.

"To try to put this together in a little order, the most obvious thing is that this patient with hypertension, renal disease, and severe arteriosclerosis simply had a thrombosis of her middle cerebral artery on the basis of arteriosclerosis. This would be what I would say if I saw this patient out on the ward. However, a CPC is usually a little different from a patient you see out on the ward. I think that we will have to take into consideration some of the things that we have been told along the way, whether they are of any value or not.

"This abdominal pain that the patient experienced terminally is confusing. Since we have a pretty good idea that this patient had generalized vascular disease, one thing that must be considered is a dissecting aneurysm of the abdominal aorta. This could have started with an arteriosclerotic plaque breaking off and blood dissecting into the wall of the vessel. These lesions are nearly always associated with severe pain and shock, and in most cases death follows quickly. This girl lived for five days after the onset of abdominal pain, and we are not told whether or not she continued to have severe abdominal pain during this five day period. Continuance of the pain would indicate a dissecting aneurysm of the abdominal aorta. This could dissect upward, involve the renal arteries, and give the apparent renal disease that she had. It is possible that an embolus may have been thrown off, and this may have been an embolus of the middle cerebral artery of the brain with subsequent infarction of the hemisphere.

"We are told that the arteriogram showed a shift of the anterior cerebral from left to right. I would certainly need to see the amount of that shift before I came to a definite decision, but all the lesions that we have mentioned can cause a shift of the anterior cerebral artery. In a cerebral thrombosis, an infarction secondary to the thrombosis with subsequent edema of the hemisphere will give a very significant shift of vessels on the arteriogram. The same is true of an embolus in the middle cerebral vessel with an infarction distal to the embolus with edema. So the fact that there was a shift of the anterior cerebral from left to right certainly is no strong evidence against this being a vascular lesion.

"To try to arrive at a final summary, I think this patient, in addition to the apparent hypertensive cardiovascular disease, had renal disease. She had a vascular occlusion of the middle cerebral artery on the left side with a subsequent infarction of the hemisphere involving the internal capsule, the thalamus, and probably the brain stem. This vascular occlusion could either have been a thrombosis or an embolus. As a possible source of an embolus, I have mentioned a dissecting aneurysm of the aorta in which an arteriosclerotic plaque may have been thrown off in the process of dissection. I do not think that there is much evidence of a tumor here mainly because of the sudden onset of the paralysis and the aphasia and the fact that we have such a good set-up for a vascular lesion. One big question in my mind is why this 37-year-old woman should have such severe arteriosclerosis."

X-RAY DATA

Dr. Robert Sloan: "As you might guess, the chest study was obtained in the recumbent position, and in this projection it is a little more difficult to evaluate the status of a heart and great vessels. While the official x-ray report states that the study was essentially normal, my own analysis would be that the heart is probably somewhat enlarged. Certainly, there appears to be rather gross dilatation and tortuosity of the aorta. The pattern is compatible with a dissecting aneurysm, although from this single film it would not be possible to make a specific diagnosis of this entity. Routine skull films did not, in my opinion, reveal any gross pathology.

"Bilateral cerebral arteriograms were also done. Both anterior cerebral complexes filled when the contrast material was introduced into the left internal carotid artery, and there is some apparent displacement of these vessels to the right. There was at no time any opacification of the left middle cerebral complex, while the middle cerebral on the right side did fill. There was gross distortion of the lumen of the left internal artery in the neck. I debated whether or not these changes could be due to a dissecting aneurysm extending up into the carotid but would have to say that the pattern could easily be explained by extensive arteriosclerotic changes."

Dr. Tutor: "I can only add that I think the widening of the aorta in this would add more evidence to the possibility of this being a dissecting aneurysm involving probably the ascending aorta rather than the thoracic aorta. I don't know why she should have pain down in the abdomen unless this thing had dissected all the way down. This could have been the case."

PATHOLOGIST'S REPORT

Dr. Joel Brunson: "Thank you Dr. Tutor. This patient did have a central nervous system lesion in a dissecting aneurysm, as Dr. Tutor diagnosed. There was extension of the dissection all the way down the aorta, extending down as far as the prosector dissected into the iliacs. There was dissection also into the inferior and superior mesenteric arteries, into both renal arteries, and also up into the neck vessels as far as the prosector traced those. It involved all three branches arising from the arch of the aorta. In addition, it had dissected back into the pericardial cavity, and there was cardiac tamponade due to hemorrhage of about 1,200 ml. of blood.

"The heart was not remarkably enlarged. It was perhaps a little above the upper limits of normal for a patient of this age and showed reasonably little atherosclerosis as far as the major coronary arteries were concerned. However, the intramural coronary arteries were fairly thick, and there were scattered areas of scarring in the myocardium. Other than that, the heart was essentially normal. There also was pulmonary edema which was probably a terminal manifestation of cardiac failure, and there was also some blood in the abdominal cavity. Presumably the dissecting aneurysm ruptured from one of the smaller vessels, but we were unable to locate the specific vessel.

"Changes in the brain consisted of almost complete infarction of the left cerebral hemisphere with the exception of the occipital lobe. The left middle cerebral artery was filled by a thrombotic mass which we believed originated from the dissecting procedure arising in the aorta. Microscopic sections from the aorta showed the so-called characteristic cystic medial necrosis, which is not thought to be due to atherosclerosis, but is thought to be due to disease of the vasa vasorum, with narrowing of these vessels and diminution of the blood supply to the media of the aorta. In association with this, and for unknown reasons, the media undergoes dissolution, with 'pools' of necrotic or liquid material. This patient also has some evidence of cardiac failure, perhaps of a mild degree, in that the liver showed changes of passive congestion.

"As far as the renal disease is concerned, it is difficult to classify. I believe that it was probably due to the changes in blood flow as a consequence of extension of the dissecting aneurysm into the renal arteries. Many of the glomeruli were enlarged, and many appeared hypercellular. The most striking abnormality was a fusion of the capillary loops and a thickening of the basement membranes, changes that are associated with nephrosis or the nephrotic syndrome. I wonder if this change in blood flow is not comparable to that which occurs when the renal veins undergo thrombosis, and the nephrotic syndrome occurs. We have had occasion recently to examine the kidney from a patient who had muscular hyperplasia of one renal artery. There was also thickening of the basement membranes of the capillary loops in that patient. It would be interesting to know what the urinary findings were on the patient under discussion. We don't have those at hand, but I suspect that had the patient lived, she would have had some evidence of nephrosis." ★★★

2500 North State St.



The President Speaking

'Intravenous Injections'

JOHN G. ARCHER, M.D.
Greenville, Mississippi

ADMINISTRATION OF INTRAVENOUS injections to hospital patients by other than physicians has been a subject for discussion and debate in many areas of the nation. Recently, such discussions have been conducted in Mississippi among representatives of the state medical association, the Mississippi Hospital Association, the Mississippi League for Nursing, and the Mississippi Nurses Association. Each organization, recognizing policy differences in this connection, shares a common position that the well-being of the patient is the first concern.

As with other medical procedures, administration of IV injections suggests certain medicolegal considerations. One proposal brought forward would require determination of competency of registered nurses by the medical staff as a condition precedent to permitting nurses to perform such administrations.

The association's Council on Medical Service has studied this problem, recommending a policy position which has been approved by the Board of Trustees. It states:

> "Intravenous injections should be administered by trained persons only and it is a responsibility of each hospital to train those persons and to determine who is qualified to administer such injections."

The position of the state medical association logically reserves responsibility for the local level, recognizing that the hospital is the primary professional community. Second, the MSMA policy provides for a latitude of flexibility which is thoroughly in keeping with recognition of and respect for locally exercised professional practice prerogatives.

The issue appears to be one of choosing between an inflexible, centrally fixed policy for local implementation and one which reserves the matter of qualification to the local level as best suits the needs of the professional community. The state medical association has assumed the latter position. It is important for physicians to discuss and weigh the factors involved. ★★★

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EDITORIALS

Blue Chip Investment—The Voluntary Way

RAYMOND F. GRENFELL, M.D.
Jackson, Mississippi

I

DECADES OF PROGRESS have been realized in just 12 years by the American Medical Association Education and Research Foundation. This private, voluntary effort by physicians is paying huge dividends in its support of medical education and research. AMA-ERF is growing because its value has been demonstrated. The American medical professional community chose wisely in the selection of this means for getting a job done in the fulfillment of a high responsibility. In keeping with this goal, however, AMA-ERF is voluntary, a refreshing and stimulating thought in this era of federally sponsored compulsion.

From a modest beginning in 1951 with the former American Medical Education Foundation, this effort has been expanded into a flexible program with a useful future and great potential. For the first 10 years, funds were used only for medical school support in direct grants. In 1961, the Medical Education Loan Guarantee Program was initiated by the House of Delegates meeting at New York. It has become a vital source of doctor-training dollars, furnishing help when help is needed but appropriately reposing responsibility and initiative in the medical trainee. Is it not logical and reasonable to conclude that this aspect, unto itself, contributes toward the making of better physicians?

II

Our own University of Mississippi School of Medicine has benefitted from AMA-ERF grants. To be sure, these sums are not enormous, but school officials have expressed satisfaction and appreciation for them. Moreover, these voluntarily given grants may be used as the school sees fit. To some extent, this increases the value of the amount because it enables deans and clinical chiefs to meet specific challenges in financing needed activities. It is clearly seen that an optimum climate has thus been created in the use and application of these funds as well as in the voluntarism inherent in their solicitation.

The sums given annually to UMC by the foundation have been progressively larger. This is indicative of the sound growth in AMA-ERF and the stability it has achieved as a permanent program of American medicine. This is the sort of growth and stability we should seek, much to be preferred over erratic, even though dramatic, fluctuations up and down. It is also reasonable to accept this progressive growth pattern as evidence of mounting acceptance of the effort by American physicians.

Chairman, Committee on American Medical Association Education and Research Foundation, Mississippi State Medical Association.

III

The student, intern, and resident loan program is an astonishing and gratifying development. Because one AMA-ERF dollar releases 12½ dollars in loan credit, the plan has a geometric increase in effectiveness. More than 8,000 students, interns, and residents have qualified for more than $18 million in loans. Consistent with the voluntary, private characteristics of the entire undertaking, the loans are made by private banking institutions.

Students at the Ole Miss medical school rank sixth nationally in use of the loan program with 109 such arrangements now in effect. In each instance, AMA-ERF has entered the agreement as cosigner, thereby guaranteeing repayment of the obligation.

IV

AMA-ERF has emerged from the experimental and developmental phase into one best described as institutional. In fewer words, it's here to stay. We physicians have again demonstrated, as has been done in private financing of medical care, that the response and capability of the private sector is adequate. We now have the opportunity of strengthening this established concept. It affords us still further opportunity to exercise leadership in behalf of private initiative by precept and example.

But more than anything else, we are playing an important role in training tomorrow's physicians and in helping to meet the challenges of improving health care through scientific research.

Whether modest or generous, earmarked or undesignated, give voluntarily to AMA-ERF. It is more than just another contribution to a good cause; it is an investment in the professional future of medicine which assures continuation of American medicine's world pre-eminence. ★★★

514-H East Woodrow Wilson Drive

The Chiropractic Stew

The state legislative scoreboard on chiropractic for 1963 totes up to ironic totals. The cultists admittedly cracked a big one with the winning of licensure in New York but only with the active assistance of Nelson Rockefeller's liberal political steamroller. But legislative tries in a third of the states were considerably less fruitful for the spine punchers.

Connecticut, Illinois, and Nevada, where chiropractic licensure exists, adopted additional educational requirements as conditions precedent for license renewal. Indiana's lawmakers turned thumbs down on a proposal to permit the cultists to excuse children from school physical fitness programs. In Maine, a bill to include chiropractic in workmen's compensation died in committee. After a stormy legislative battle, Maryland rejected the cultists' participation in the state's program of care for the indigent.

Massachusetts, one of the three states in which chiropractic has not been licensed, killed a licensure proposal. In Michigan, a bill asking a legislative study of chiropractic got the same treatment. Two Minnesota bills which would have required accident and health insurance to pay chiropractors were indefinitely postponed. In Ohio, a measure to create a state board of chiropractic examiners got pigeonholed. Tennessee's legislature beat two bills which would have excluded chiropractors from present healing arts licensure, and West Virginia sidetracked a proposal to liberalize the cultists' present licensure law. Wisconsin passed a law prohibiting "either use or possession of radiation devices by chiropractors."

There is evidence of increasing awareness on the part of Mississippi legislators of the dangers



inherent in the licensure of chiropractic. The 1963 scoreboard ought to convince them even more. States with legalized cultism seem to stew in a continuous legislative boil. So New York has a lot to learn.—R.B.K.

Negotiation

From time to time, the notion is advanced that medicine ought to negotiate on King-Anderson-type legislative proposals. Reasons range from getting the issue out of the public arena all the way to nebulous references to "social justice." Now the term "negotiation," apart from its familiar meaning in the sense of business transactions, describes the act of parties at disagreement finding a common position which is acceptable to each. Usually, this ideal fails and one party loses, despite external appearances. Here's a case in point:

A hunter was tracking a bear. Suddenly, he came upon his quarry and raised his rifle. The hunter was astonished to hear the bear say, "Don't shoot, sir. Rather, let us negotiate."

"And how shall we do that?" asked the hunter, lowering his rifle.

"First," replied the bear, "we must know what you want from this hunting venture."

"I want a fur coat," responded the hunter.

"Fine," said the bear, "that is negotiable. All I seek is something in my stomach, a simple wish. Come and sit down with me and let us negotiate."

Soon, one party—and only one—arose from the negotiation conference. It was the bear: He had a full stomach and the hunter was in his fur coat.—R.B.K.

LETTERS

SIRS: I am very much interested in obtaining a copy of the September issue of the JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION. A recent periodical referenced this issue of your JOURNAL in connection with an editorial and series of papers on medicine and religion. As a physician and hospital commander, I am deeply interested in these subjects.

M. ROBERT HALBOUTY
COLONEL, USAF (MC)
COMMANDER
DYESS AFB HOSPITAL, TEXAS

PERSONALS

J. M. BLOUNT, JR. of Philadelphia has announced the association of JACK HOUSTON in the practice of medicine and surgery. Dr. Houston received his medical degree from the University of Mississippi School of Medicine and interned at Baptist Hospital in Jackson.

FRANK L. BRANTLEY of Madden was honored by the University of Tennessee Medical Units with the presentation of a Golden "T" certificate and tie emblem in honor of his 50 years of medical service. He is one of 35 graduates to receive this honor.

JAMES W. HUNTER of Meridian has begun work as director of the health departments in Alcorn, Prentiss and Tishomingo Counties through an appointment by A. L. GRAY, state health officer.

J. N. LOCKARD, WILLIAM J. WEATHERFORD and L. O. STEWART of Pascagoula have announced their association in the practice of medicine and surgery. Dr. Lockard graduated from Tulane University, interned and served his residency at Touro Infirmary, New Orleans, La. A graduate of Duke University, Durham, N. C., Dr. Weatherford completed his internship at Watts Hospital, Durham, N. C., and served his residency at City Hospital, Mobile, Ala. Dr. Stewart was graduated from Louisiana State University and interned at Riverside County Hospital, Arlington, Calif.

ALBERT L. MEENA of Jackson has been installed as chairman of the Hinds County Heart Council. He succeeds J. MANNING HUDSON. PERRIN BERRY is medical representative to the council.

GLEN T. PEARSON has been elected president of the board of directors of the Hattiesburg YMCA.

CHARLES M. PUGH of Jackson has announced the opening of his office in Jackson for the practice of neuropsychiatry. Dr. Pugh received his medical degree from the University of Tennessee, interned at Seaside Memorial Hospital, Long Beach, Calif., and completed his residency at the University of Alabama Medical Center.

DEATHS

ARMSTRONG, JOSEPH FLYNT, Jackson. M.D., University of Virginia School of Medicine, Charlottesville, 1920; interned Orange Memorial Hospital, N. J., one year; member, Southeastern Surgical Congress and Southern Medical Association; Fellow, American College of Surgeons and the International College of Surgeons; emeritus member of MSMA; died Sept. 4, 1963, aged 66.

BYARS, ROY DEWITT, Cascilla. M.D., University of Tennessee College of Medicine, Memphis, 1914; emeritus member of MSMA; died Sept. 3, 1963, aged 78.

HUGHES, JAMES ARCHIE, Gulfport. M.D., University of Tennessee College of Medicine, Memphis, 1931; interned Duval Medical Center, Jacksonville, Fla., one year; member, American Psychiatric Association and the Mississippi Psychiatric Society; certified by the American Board of Psychiatry and Neurology in 1949; died Sept. 13, 1963, aged 61.

WYNNE, ANDREW MONROE, Merigold. M.D., Memphis Hospital Medical College, Tenn., 1904; interned St. Joseph Hospital, Memphis, Tenn., one year; member, Association of American Physicians and Surgeons, American Association of Railroad Surgeons, and Southern Medical Association; emeritus member of MSMA and member of the Fifty Year Club; received certificate from the University of Tennessee College of Medicine, Memphis, for 50 years of medical service; died Sept. 8, 1963, aged 79.

State Morbidity Reported Through Sept. 27

The Mississippi State Board of Health reports the following occurrence of morbidity for 1963 through the 39th week of the year, ending Sept. 27, 1963. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	609
Tuberculosis, O.F.	30
Typhoid Fever	14
Encephalitis, infectious	16
Salmonella infections	16
Diphtheria	1
Dysentery	
Bacillary	61
Amebic	10
Dysentery, NOS	1
Food Poisoning, NOS	22
Diarrhea of Newborn	9
Septicemia, Strep.	1
Septicemia, Staph.	50
Septicemia, other	1
Septicemia, NOS	13
Septicemia of Newborn	6
Meningococcus infection	
Meningitis	69
Meningococcemia	2
Meningitis, O.F.	59
Gas Gangrene	1
Bac. Diseases, other	1
Polyneuritis	1
Poliomyelitis	7
Tularemia	2
Mononucleosis, infectious	95
Malaria, Vivax	1
Other Cestode Infest. (HN)	1
Hepatitis, infectious	510
Adenovirus (ARD)	3
Rocky Mt. Spotted Fever	1
Gastro-Enteritis	3
Helminthic infections	
Hookworm	1,048
Ascariasis	333
Strongyloides	53
Blastomycosis	1
Cryptococcosis	1
Myelitis	3
Sporotrichosis	2
Generalized Vaccinia	1
Rheumatic fever	7
Rheumatic heart	5
Histoplasmosis	7
Streptococcus infections	
Scarlet fever	225
Strep throat	2,086
Other inf. and parasitic diseases	1
Pertussis	88
Measles	721
Chickenpox	932
Tetanus	4
Mumps	624
Other complications of smallpox vaccination	3
Influenza	32,145
Gonorrhea	3,954
Syphilis	
Early	314
Late	118

Book Reviews

Medical Laboratory Technology. By Matthews J. Lynch, M.D., *et al.* 735 pages with illustrations. Philadelphia: W. B. Saunders Company, 1963. $12.00.

This book is a treatise for use by the medical technologist who has completed extensive training in the field of medical technology. It is apparently satisfactory as a reference source for the medical technologist in an adequately equipped and staffed hospital.

Chapters related to various chemistry procedures appear to be quite adequate, and the chapters concerning blood disorders are well written and are excellent for reference use by the trained technologist.

The chapter related to parasitology is at variance with other recognized texts in that certain species have not been included, and in other instances the text is at variance with other recognized texts concerning infection vs. infestation.

It is unfortunate that the cuts are all black and white. This gives the book a limited use in the hospital or laboratory without qualified consultants immediately available.

I would recommend this text for use as a reference source.

H. C. Ricks, M.D.

Textbook of Ophthalmology. ed. 7. By Frances Hood Adler, M.D., Emeritus Professor of Ophthalmology, University of Pennsylvania Medical School; Consulting Surgeon, Wills Eye, Philadelphia General, and Children's Hospitals of Philadelphia. 560 pages with illustrations. Philadelphia: W. B. Saunders Company, 1962. $9.00.

This is the seventh edition of what was originally *Gifford's Textbook of Ophthalmology,* the first edition being published in 1938. Dr. Adler has been writing the revised editions. This is the first edition not called by Dr. Gifford's name, but Dr. Adler expresses in the preface to the seventh edition indebtedness to Dr. Gifford for the original conception of the book as eliminating all rarer conditions and treatment, and surgery only to be undertaken by ophthalmologists.

This book is especially valuable for medical students, general practitioners, internists, and neurologists. It is also good for ophthalmologists for quick review of certain ophthalmology subjects, especially as related to general medicine.

A new opening chapter on symptomatology refers the student or practitioner to the pages in the book where the conditions causing these symptoms may be described. Other chapters explain thoroughly methods of examination to be used by the practitioner.

The short but accurate description of dendritic ulcer of the cornea (herpes simplex) should help to prevent the practitioner from using corticosteroids for this condition, which is one of the two conditions for which they are absolutely contraindicated—the other being tuberculosis of the eye.

The classification of the retinal arteriosclerotic and hypertensive changes will be very helpful to medical men as well as in helping eye men to organize their thinking on the subject.

All considered I think that this seventh edition is a worthy successor to the previous editions.

Samuel B. Caruthers, M.D.

Office Procedures. By Paul Williamson, M.D. 440 pages with illustrations. Philadelphia: W. B. Saunders Company, 1962. $13.50.

About 20 years ago, I read a little book on medical writing written by an editor of a large medical journal. The message that I got was, that among other things, medical writing should be dull. Dr. Williamson evidently never read this book, or if he did, he ignored it. His *Office Procedures* is one of the most interesting medical books I have ever read. The author injects his personality into the writing from start to finish. The work is not encyclopedic in scope, but it does give procedures carried out by a busy, successful practitioner and his colleagues, including his office help, in a small town office. The book stresses simplicity, thoroughness, gentleness, and humanity. The author goes out of his way to describe procedures to spare the patient as much pain as possible. The illustrations are simple and excellent (an exception might be pictures of bone x-rays which, to me, were confusing).

The book has no bibliography; in fact, there is a footnote apologizing for forgetting the name

of a man whose procedure for the rapid culture of tuberculosis he inserts into the book. However, sources are quoted quite often, such as the authors and the publishers of psychological testings. The author stresses the use of equipment and cites the need for certain equipment. He stresses using simple things and equipment that is at times homemade, such as a homemade incubator and an audiometer made from a tape recorder. Dr. Williamson notes that a bobby pin makes a good curet for ear wax and a bent paper clip a good hook for removal of foreign body from the nose.

The book contains 15 sections with subdivisions under these sections. They include ear, nose, and throat, the eye, musculoskeletal system, gynecology, obstetrics, urology, proctology, pediatrics, geriatrics, minor surgery, internal medicine, office psychiatry, anesthesia, physical medicine, and roentgenography.

A surprising number of office procedures on the ear, nose, and throat, and the eye can be done with profit to the patient in a nonspecialist office. When a patient's condition requires a specialist or hospitalization, this is recommended. He recommends a tonometer for every physician, and I certainly concur. Glaucoma is a problem, and with our anticholinergic medications and drugs of that sort, glaucoma has been precipitated many times, I am sure.

The section on the musculoskeletal system is very good and includes fractures. It also stresses the fact that many severe injuries to the soft tissues can and do occur with no x-ray evidence.

In the section on gynecology, the author discusses examination and recommends at times using trichloroethylene through the Duke inhaler to relax the tense patient. He gives the technique of various examinations in office treatment of minor gynecological conditions, sterility studies, and female hygiene.

The section on obstetrics does not go into the labor, but gives the prenatal and the postpartum care of the pregnant woman.

The urology section includes cystoscopy, the use of sounds, the treatment of strictures, minor office operations, and laboratory examinations.

The section on proctology stresses the examination, including sigmoidoscopy and the office treatment of hemorrhoids and prolapse by minor office surgery or by injection. The section on fecal impaction can be read with profit by anyone.

The section on pediatrics is also good. It starts with examination of the newborn and the well child and gives the different diseases common to children, including the procedures used in the diagnosis and treatment of these that may be employed in the office. In this section, the author writes, "I have no compunction at all about telling parents, and my adult patients, that I intend to take care of the whole patient, not just give pills and shots, and that I intend to charge for it. Some go away, but those who stay are delightful people with whom to work."

The section on geriatrics stresses sympathy and understanding with these old people and brings to mind some of the peculiarities of old age.

The tyro as well as the most experienced and blase surgeon can profit by reading the section on minor surgery. The section stresses that the results in minor surgery are almost uniformly poor. True, the pathology is removed, but the morbidity is much greater than it should be. "Good results depend upon explanation and psychological preparation of the patient," the author writes. Important factors, he says, are adequate anesthesia, gentle handling of tissue, elimination of foreign bodies and dead spaces insofar as possible, and accurate apposition of tissues without undue pressure. This section also includes a discussion of bandaging, which is excellent.



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"Don't tell me he has his license back again!"

The section on internal medicine includes the diagnosis of infectious diseases, digestive diseases, heart disease including x-ray, blood diseases, neurological examinations, and examinations for endocrine disorders. There is a short discussion on dermatology and allergic diseases and a good examination routine of the peripheral vascular system.

The section on office psychiatry states the goals and how to achieve these goals. It gives some psychological tests and some simple treatment. It stresses that when a psychosis becomes major, or there is a depression with danger of suicide, hospitalization and psychiatric consultation are almost emergencies, if not emergencies. "You can write the entire story of almost every life in two words—'Me, Whee,'" writes the author. The problem of the physician is to find out where the patient has become side-tracked from "Me, Whee," he says.

The section on anesthesia is mainly local anesthesia and block, although ether, Vinethene, nitrous oxide and Pentothal Sodium are mentioned. This is not a complete discussion of anesthesia by any means.

I enjoyed the section on physical medicine. It gives procedures which can be employed with very good results by using simple equipment in the office.

The last section is on roentgenology. It stresses pitfalls in fractures, some answers on chest x-rays, and other office problems. It also does not hesitate to recommend a trained roentgenologist for certain procedures.

In conclusion, this book is like a talk with an experienced colleague who has had, and solved, problems that most of us in Mississippi are likely to encounter in office practice. It would be especially valuable for a young man in medicine, especially a young man doing general practice in a small town. However, more experienced people will enjoy the refreshing style of the book and probably pick up some hints that will be of value.

EDWIN M. MEEK, M.D.

Books Received

Crossen's Synopsis of Gynecology. Sixth edition. By Daniel Winston Beacham, M.D., Associate Professor of Clinical Obstetrics and Gynecology, Tulane University, and Woodard Davis Beacham, M.D., Professor of Clinical Obstetrics and Gynecology, Tulane University School of Medicine. 360 pages with illustrations. St. Louis: The C. V. Mosby Company, 1963. $7.50.

pH and Dissociation. By Halvor N. Christensen, Ph.D., Professor of Biological Chemistry and Chairman of the Department, University of Michigan. 60 pages with illustrations. Philadelphia: W. B. Saunders Company, 1963. $1.75.

Synopsis of Genitourinary Diseases. By Austin I. Dodson, Jr., M.D., Associate Clinical Professor of Urology, Medical College of Virginia, and J. Edward Hill, M.D., Assistant Clinical Professor of Urology, Medical College of Virginia. 359 pages with illustrations. St. Louis: The C. V. Mosby Company, 1963. $7.75.

Diseases of the Skin. Fifth edition. By George Clinton Andrews, M.D., and Anthony N. Domonkos, M.D. 749 pages with illustrations. Philadelphia: W. B. Saunders Company, 1963. $16.50.

The Functional Pathology of Diseases: The Physiologic Basis of Clinical Medicine. Second edition. Edited by Arthur Grollman, M.D., Ph.D., Professor and Chairman of the Department of Experimental Medicine, University of Texas Southwestern Medical School, Dallas. 840 pages. New York: McGraw-Hill Book Company, Inc., 1963. $15.00.

Personnel in World War II. Prepared and published under the direction of Lieutenant General Leonard D. Heaton, The Surgeon General, United States Army. Office of the Surgeon General, Department of the Army, Washington, D. C., 1963. 548 pages with 40 illustrations. $6.00.

Fundamentals of Blood Coagulation in Clinical Medicine. By Cecil Hougie, M.D., Associate Professor in Pathology, University of Washington, Hematology Director, Clinical Laboratories, University Hospital, Seattle, Washington. New York: McGraw-Hill Book Company, Inc., 1963. $11.95.

Office Urology. Edited by Roderick D. Turner, M.D., Assistant Professor of Surgery (Urology), University of California (Los Angeles), School of Medicine. 327 pages with illustrations. New York: McGraw-Hill Book Company, Inc., 1963. $13.50.

Physiology of the Circulation in Human Limbs in Health and Disease. By John T. Shepherd, M.D., Professor of Physiology, Mayo Foundation Graduate School, University of Minnesota, Rochester. 416 pages with 179 illustrations. Philadelphia: W. B. Saunders Company, 1963. $12.00.

NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

BRIDGES, WILLIAM DENMAN, Liberty. Born McComb, Miss., Feb. 5, 1933; M.D., University of Mississippi School of Medicine, Jackson, 1962; interned Mid-State Baptist Hospital, Nashville, Tenn., one year; elected Sept. 10, 1963, by Amite-Wilkinson Counties Medical Society.

POOLE, JAMES SWEPTSON, Centreville. Born Amite County, Miss., Oct. 29, 1933; M.D., University of Mississippi School of Medicine, Jackson, 1962; interned University of Mississippi School of Medicine, Jackson, one year; elected Sept. 10, 1963, by Amite-Wilkinson Counties Medical Society.

Scientific Exhibits Invited For MSMA's 96th Session

Prospective scientific exhibitors for MSMA's 96th Annual Session are invited to submit their space applications to the Council on Scientific Assembly, according to Council Chairman Dr. C. G. Sutherland.

Scheduled for May 11-14, the four-day meeting will have its headquarters in the Heidelberg Hotel in Jackson. The scientific exhibit will be located in Olympic Room and will be open only to registered members and guests. MSMA policy precludes opening scientific and technical exhibits to the general public.

First preference of limited space available in the scientific exhibit will be given members of the state medical association, said Dr. Sutherland. Other applicants eligible for consideration are out-of-state physicians and organizations and foundations having scientific presentations to make.

MSMA members presenting scientific exhibits are eligible for the scientific achievement award. Given for the first time in 1963, the award is a mounted medallion designed especially for MSMA by L. G. Balfour Company of Attleboro, Mass. The winner's name and year will be engraved on the medallion, which supersedes the gold medal award of previous years. Nonmember exhibitors will compete for citations of honorable mention.

Dr. Sutherland stressed that letters of applications should state the subject of the exhibit, physician or organizational sponsors, and minimum space requirement. Letters should be addressed to MSMA headquarters at 735 Riverside Drive, Jackson. Selection of exhibits will be made by a special committee of the Council on Scientific Assembly during early January 1964, said Dr. Sutherland.

Ground rules for the scientific exhibits prohibit mention of pharmaceutical or medicinal products by proprietary name. All booths must be attended during meeting hours by sponsors, who are also responsible for erection and dismantling of exhibits.

'Voodo Do Not Pay' Practitioner Discovers

"Voodo do not pay," a practitioner of black magic found out in a Leland city court recently when he was fined $100 and sentenced to 90 days in county jail.

M. C. Mitchell received his fine after peddling various "vile smelling" potions, for which he was charged with practicing medicine without a license.

He had fooled several local persons by pretending to sweeten coffee by waving his hand over the cup. But what they did not see was a small saccarine tablet dropped in the coffee, City Marshal E. J. Dean reported.

Mitchell's aliases are Willie Prette and Sam Ridley, Jr.



"She makes the neatest bed in the hospital."

MPAC Board Meets for Organizational Session, Plans Intensive Statewide Membership Campaign

The Mississippi Medical Political Action Committee became a reality in September with the formal organizational meeting of the recently named Board of Directors. MPAC will serve as Mississippi medicine's action arm in state and national politics as a force for conservative government.

Heading the PAC board are Drs. George E. Twente of Jackson, and Howard A. Nelson of Greenwood, who serve as chairman and secretary-treasurer, respectively. There are a total of nine physician directors, one from each association district, and a representative of the Woman's Auxiliary to MSMA. Mrs. R. Mayo Flynt, of Meridian, a past president of the auxiliary, has been appointed in the latter capacity.

Physician directors are Drs. Nelson representing District 1; Robert L. Holley, Jr., Oxford, District 2; Frank M. Davis, Corinth, District 3; Paul B. Brumby, Lexington, District 4; George E. Twente, Jackson, District 5; Omar Simmons, Newton, District 6; C. P. Crenshaw, Collins, District 7; G. Swink Hicks, Natchez, District 8; and Kendall D. Gregory, Gulfport, District 9. Each has been named to serve a term of one year.

Membership in MPAC is open to physicians, their spouses, and others in the health field as may be approved by the Board of Directors. Invitations to join the movement, which is cooperating with the American Medical Political Action Committee, are now being issued. Directors are appearing before local medical groups, PAC spokesmen say, to discuss the organization's purposes and goals.

MPAC was created and authorized by the state medical association's House of Delegates at the 95th Annual Session last May. The House expressed the belief that MPAC would provide a



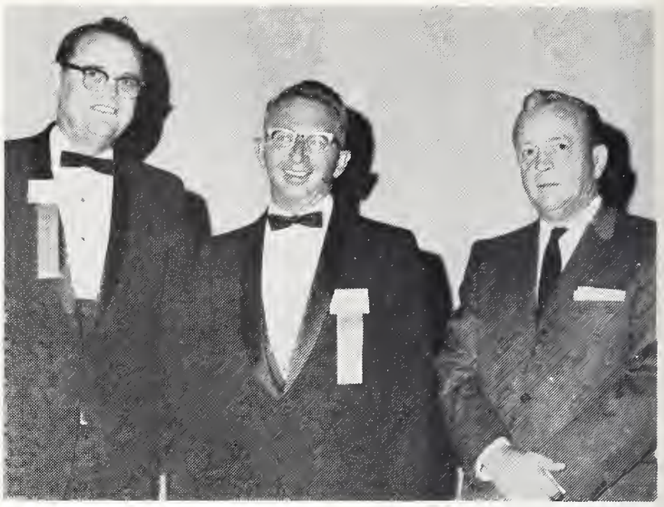
Leaders in the Mississippi Medical Political Action Committee met Sept. 19 to draft a statewide membership campaign and a program for the coming year. Present were MPAC's nine physician directors, Mrs. R. Mayo Flynt, Woman's Auxiliary Representative, and Dr. John G. Archer, MSMA president. From left to right seated are Mrs. Flynt, Drs. Twente, Simmons, and Nelson. Standing from left to right are Drs. Archer, Crenshaw, Brumby, Gregory, Hicks, Davis, and Holley.

unique means for political education, offering physicians, their wives, and others a useful and stimulating vehicle for effective participation in governmental affairs. The PAC is voluntary and offers a way in which Mississippi doctors can extend their influence and assistance in concert with their colleagues throughout the nation in the quest for conservative government.

The political action committee is separate and distinct from the association. Its dues and the contributions it receives will be used to assist conservative candidates, usually for the Congress, in close races with liberal opponents. Dues in MPAC and AMPAC, which should be paid simultaneously, range from $10 each to $5,000 each, according to the wishes of the members. The minimum total is $20 per year.

MPAC officials said that the organization will soon initiate publication of a newsletter and that political education will be stressed in the full-time operation. The current membership campaign emphasizes the need for building the organization before the 1964 political campaigns.

State medical political action committees, all created and authorized by their respective state medical associations, have been organized in 49 states.



Dr. Lawrence H. Brisco of Tupelo, left, was inaugurated president of the Mississippi Academy of General Practice during MAGP's 15th Annual Scientific Assembly. He succeeds Dr. John R. Bane of Jackson, center. Dr. Frank C. Massengill of Brookhaven, right, was named president-elect.

State GP's Hear AMA President-elect

Dr. Norman A. Welch, president-elect of AMA, charged the Kennedy administration with seeking the permanent socialization of American medicine in his speech before the 15th Annual Scientific Assembly of the Mississippi Academy of General Practice.

The assembly met Sept. 25-26 in Jackson with Dr. John R. Bane of Jackson, MAGP president, presiding.

Dr. Welch, a Boston, Mass., internist, warned that the King-Anderson bill was just the beginning and that it was the first step in a complete program of socialized medicine.

"We have a very severe fight on our hands," Dr. Welch told the general practitioners. "We stand today as the only country which has not gone down the drain to socialism." He pointed to the "unhappy" doctors in Canada, Japan, England, and Italy who operate under government controlled health programs. "I hope this does not happen to the doctors of this country," he said.

Dr. Welch refuted charges by "some newspaper columnists" that the AMA is a "hierarchy in Chicago." He said the AMA was forced to become involved in politics because, among other things, there was a potential threat to quality medical care by the proponents of government health programs.

Dr. Welch addressed the luncheon meeting on Sept. 26. The two-day assembly opened Sept. 25 with a general session on athletic injuries and their treatment.



Dr. Norman A. Welch, AMA president-elect, left, was a distinguished guest for MAGP's Sept. 25-26 meeting. He was greeted on arrival in Jackson by another president, Dr. C. P. Crenshaw of Collins, who served in MAGP's top post during 1953-54 and as MSMA president for the term 1962-63. Dr. Welch, a Boston internist, addressed the luncheon session of the asembly.

Speakers for this session included three orthopedic surgeons and three Mississippi athletic trainers. They were Dr. Marvin P. Knight, Dallas, Texas; Dr. Jack C. Hughston, Columbus, Ga.; Dr. David G. Vesely, Birmingham, Ala.; W. J. Luchsinger, head athletic trainer, Mississippi State University; Doss Fulton, athletic director, Jackson Public Schools, and Ernest Larry Harrington, athletic trainer, University of Southern Mississippi.

Diseases of the chest was the major topic of the program for Sept. 26. Dr. James C. Griffin of Jackson discussed "Traumatic Injuries to the Chest," and "Cancer of the Lung"; Dr. Duane Carr, professor of surgery, University of Tennessee, spoke on "Emphysema" and "Hiatal Hernia as Related to Chest Symptoms." Also during the Sept. 26 program, Dr. Robert E. Weibel, instructor in pediatrics, University of Pennsylvania, talked on "Measles Vaccine."



During his September visit to Jackson as guest of the state's general practitioners, AMA President-elect Dr. Norman Welch, center, took time out to speak to staff and students at the University of Mississippi School of Medicine. He is shown here with Dr. Robert Marston, dean, right, and Dr. John B. Howell, MAGP delegate to the American Academy of General Practice, left.

Moderators of the seminars were Dr. Thomas Henry Blake, Jackson; Dr. Ben F. Banahan, Jackson, and Dr. Walter W. Crawford, Tylertown.

Officers elected at this year's session were president-elect, Dr. Frank C. Massengill of Brookhaven; vice-president, Dr. William M. Wood of Brookhaven; secretary-treasurer, Dr. Max L. Pharr of Jackson; national delegate, Dr. William E. Lotterhos of Jackson; national alternate delegate, Dr. A. T. Tatum of Petal; director, district one, Dr. Eldon L. Bolton of Biloxi; director, district three, Dr. Jim C. Barnett of Brookhaven; director, district five, Dr. Pete H. Rhymes of Philadelphia; director, district seven, Dr. Robert A. Hollingsworth of Shelby, and director, district nine, Dr. Robert L. Holley of Oxford.

Dr. Lawrence H. Brisco of Tupelo was installed as MAGP president during the annual banquet on Sept. 25.

Seven Physicians Address Mental Health Meet

Seven state physicians took leading roles in the First Statewide Conference on Mental Illness which met Sept. 10-11 in Jackson.

Sponsored by the Mississippi Association for Mental Health, the program attracted more than 200 registrants. Discussion focused primarily on the hospitalization, treatment, and rehabilitation of the mental patient.

Physicians addressing the hospitalization and treatment session were Dr. W. L. Jaquith, director, Mississippi State Hospital, Whitfield; Dr. Floy Jack Moore, professor and chairman, Department of Psychiatry, University of Mississippi School of Medicine; Dr. Willard L. Waldron, Jackson psychiatrist; Dr. A. L. Gray, executive officer, State Board of Health, and Dr. W. B. Hawkins, chief of staff, Veterans Administration Center, Gulfport.

In later sessions, Dr. Eugene J. Chernell, instructor in psychiatry, University of Mississippi School of Medicine, spoke on childhood mental illness, and Dr. J. J. Head, clinical director, Mississippi State Hospital, and chairman of MSMA's Mental Health Committee, discussed "The Mississippi State Medical Association's Role in Planning for Mental Health."

The two-day conference concluded with tours of the Mississippi State Hospital at Whitfield and the Hinds Mental Health Services Center in Jackson.

Coast and Lowndes Societies Open Immunization Drives

The Coast Counties Medical Society opened its mass polio immunization campaign Sept. 22 with a record turnout from the four-county area.

Final totals showed that approximately 115,000 residents of Harrison, Jackson, and Stone counties were given Type I Sabin oral polio vaccine, putting the percentage of residents vaccinated at 89.1. At the same time, about 13,000 residents of Hancock County, the fourth county in the society, turned out for the third vaccine in the

series. The two other vaccines had been administered earlier to persons in the Hancock area.

Coast residents will receive the Type II oral polio vaccine on Oct. 27 and Type III on Dec. 1. Dr. B. B. O'Mara of Biloxi is general chairman of the program, which the medical society is underwriting.

Meanwhile at the northeastern end of the state, residents of Lowndes County turned out for the Type I oral vaccine on Sept. 29 with Types II and III scheduled for Nov. 3 and Dec. 8. Officials of the Lowndes County Medical Society, which sponsored the campaign, had a 47,000 turnout as their goal.

No charge was made for the oral vaccine by either the Coast Society or Lowndes Society. However, donations of twenty-five cents per person were accepted to help defray the cost of the vaccine.

A precedent for the two medical society campaigns was set in the spring of this year by the Homochitto Valley Medical Society. In a campaign stretching over February, March, April, and May, approximately 26,000 residents of Natchez and Adams County received the Sabin oral vaccine.

Construction Underway On UMC Diagnostics Building

Construction is underway on the diagnostics and treatment building at the University of Mississippi School of Medicine with completion set for Fall 1964.

The two-story structure is designed to ease overcrowded conditions for the Departments of Clinical Laboratory Sciences and Radiology and the heart station. Located directly south of the present building, the new addition will connect on both floors between the east and west hospital wings.

At the current time, the Department of Clinical Laboratory Sciences is operating on 24-hour-shifts. The department has spread into the halls and down the corridors in an effort to keep pace with the demand for laboratory analysis work, which has boosted total procedures performed from 126,000 to about 600,000 in eight years.

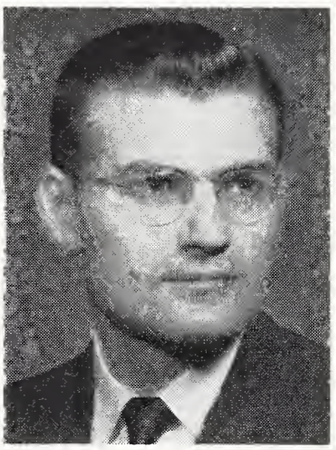
The heart station will have twice the current space for its spiraling load of EKG's and catheterizations. Radiology's cramped facilities not only will have room to spread out, but space for new equipment will be available.

Cost of the unit is set at one million dollars, including all new equipment. It will be funded one-third with state appropriations and two-thirds from the Federal Hospital Care Commission.

Thoracic Society Names Dr. Webb President

The Southern Thoracic Society elected Dr. Watts R. Webb of Jackson as president during its annual meeting Sept. 27 in Dallas, Texas.

Dr. Webb is professor of surgery at the University of Mississippi School of Medicine and chairman of the University Medical Center Postgraduate Education Committee. During the past year Dr. Webb served as president-elect of the Southern Thoracic Society. He previously served as secretary.



Dr. Webb

A member of numerous medical and surgical organizations, Dr. Webb was the 1961 recipient of the Shipley Award of the Southern Surgical Association. His work on the first human lung transplantation attracted worldwide interest in June 1963.

Members of the Southern Thoracic Society include physicians interested in tuberculosis and other respiratory diseases from 13 southeastern states, including Mississippi.

Delta Society Convenes For 80th Meet

Dr. Harwell Wilson, chairman and professor, Department of Surgery, University of Tennessee College of Medicine, was the guest essayist for the 80th semi-annual meeting of the Delta Medical Society.

Delta Society members convened Oct. 9 at the Greenwood Leflore Hospital for the half-day scientific session. Dr. Wilson addressed the group on "The Surgical Aspects of Jaundice."

During the closing business session, Dr. T. M. Riddell of Shaw was inaugurated as president, succeeding Dr. S. G. Mounger of Greenwood. Other officers elected were Dr. C. M. Dorrough of Ruleville, president-elect; Dr. Howard A. Nel-

son of Greenwood, secretary-treasurer, and Dr. Guy H. Robinson of Indianola, vice president from Sunflower County.

Other papers read before the meeting were "Practical Uses of Cardiac Catheterization" by Dr. Issac A. Newton, Jr., of Greenville; "Doc, I Feel Bad" by Dr. Toxey E. Hall of Belzoni; "Carcinoma of the Thyroid" by Dr. John F. Lucas, Jr., of Greenwood; "Surgical Treatment of Disease of the Aorta and Major Branches" by Dr. Hector Howard of Memphis, and "Psychological and Emotional Aspects of Geriatric Care" by Dr. George W. Green, Jr., of Benoit.

Discussers were Drs. R. S. Spain of Greenville; T. M. Riddell of Shaw; R. W. Browning of Greenwood, and Leon Lenoir, Jr., of Greenville.

Dr. Long Named VP Of ICS United States Section

Dr. Lawrence W. Long of Jackson, a past president of MSMA and a longtime leader in state medical circles, was inaugurated as vice president of the United States Section, International College of Surgeons, during the section's meeting Sept. 13 and 14.

Dr. Long, who has served as ICS regent to Mississippi for a number of years, is currently a member of the International College's Auditing Committee.

Incoming president of the United States Section is Dr. John B. O'Donoghue of Chicago. Dr. O'Donoghue has served the section as president-elect, second president-elect, and secretary. He holds a clinical professorship of surgery at the Stritch School of Medicine of Loyola University and a professorship of surgery at the Cook County Graduate School of Medicine. He is senior attending surgeon at both Mercy and Cook County Hospitals.

Dr. Edward Annis, now serving as president of the American Medical Association, was named president-elect of the United States Section. Dr. Annis attracted nationwide interest in his 1962 debates on health care of the aged with CIO President Walter Reuther and Senator Hubert Humphrey. He played a leading role in AMA's televised response to President Kennedy's appeal for support of the administration's socialized medical care bill.

The United States Section is the largest constituent national section of the International College of Surgeons. The installation of officers was part of a two-day Chicago meeting of the section's executive council.

MSMA-MHA Liaison Group Meets for Oct. 3 Session



Guides for relationships between associations and upcoming state legislation were the two topics under discussion as the Mississippi State Medical Association-Mississippi Hospital Association Liaison Committee convened for an Oct. 3 meeting. MHA President C. P. Wimberly of Gulfport, seated left, and MSMA President John G. Archer of Greenville, seated right, led the session. Looking on are, left to right, Paul J. Pryor of Jackson, MHA president-elect; Dr. Omar Simmons of Newton, MSMA president-elect; Dr. Edwin H. Cole of Laurel, chairman, MHA Council on Professional Practice, and Dr. Guy T. Vise of Meridian, chairman, MSMA Council on Medical Service.

Heart Group Allocates $112,000 in Grants

The Mississippi Heart Association has allocated approximately $112,000 for research, training, and community service grants this year, according to Joseph Latham of Jackson, state president.

A community service award of $12,500 went to the heart-lung division at the University Medical Center to help pay for a cineangiographic unit. This new device will make possible delicate diagnostic studies inside the left heart. It will also trace the course of radiopaque substances through the veins to pinpoint circulatory troubles.

Heading the list of research awards is $20,000 pledged annually for the Mississippi Heart Association research professor of cardiology at the University Medical Center. The professorship, established in the Department of Medicine in

1962, is the only such academic position supported by a health organization in Mississippi.

MHA research grants also went to 10 other state scientists. They include six at the University Medical Center—an anesthesiologist, an internist, two biochemists, Dr. Harold White and Dr. Connie McCaa, and two physiologists, Dr. Lowell Stone and Dr. Travis Richardson. Four awards went to Ole Miss investigators at Oxford, Dr. Theodore Bieber, Dr. Barton Milligan, Dr. Joseph Sam, and Dr. Lewis Nobles.

At the Medical Center, the heart association has set up $5,000 fellowships, plus dependency allowances, in surgery, medicine, pharmacology and physiology. Over $51,000 is budgeted for the ten research awards and four fellowships.

Another $28,000 is invested in American Heart Association jointly supported research projects including a long-term award to Dr. Arthur C. Guyton, chairman of the physiology department at the university, former Mississippi Heart Association president, and current American Heart Association director.

Money for the Mississippi Heart Association grant program comes from February Heart Fund contributions, which totaled $188,000 in Mississippi last year, according to MHA President Latham.

Dr. Beacham To Head State Cancer Society

Dr. A. V. Beacham of Magnolia has been elected president of the Mississippi Division, American Cancer Society, to succeed Dr. R. H. Fenstermacher of Vicksburg.

The election of new officers and directors for the Mississippi Division of ACS occurred at the Sept. 19 meeting of the Board of Directors at the Hotel Heidelberg following the annual meeting of members.

The new president is a longtime member of the ACS board of directors and a past president of the Mississippi Chapter, American Academy of General Practice. He presently serves on the Professional Education Committee of the Division.

Dr. Richard G. Burman, Gulfport, was named vice president-president-elect for the Division. He is director of the South Mississippi Tumor Clinic at Gulfport. Other vice presidents elected include: Mrs. J. T. Latham, Eupora; Lee Miller, Starkville, and George Altbach, Gulfport. Mrs. Warren Jones of Forest was elected secretary, and A. Ray Tillman, Jackson, was re-elected treasurer. Joseph W. Carson, Meridian, former secretary, was named chairman of the board of directors.

Members of the Executive Committee at large elected were Dr. Frank A. Wood, Jackson; Dr. Sam G. Sanders, Jackson, and Dr. J. Ralph Noonkester, Hattiesburg.

Lay members named to the board were Charles Pringle, Biloxi; Mrs. F. E. Gilliland, Clarksdale; Mrs. J. T. Latham, Eupora; Sebe Dale, Jr., Columbia; Max McLaurin, Jackson; John Milandin, Pascagoula; A. Ray Tillman, Jackson, and Jerry Barrier, Yazoo City.



Dr. A. V. Beacham, seated, far right, was elected president of the Mississippi Division, American Cancer Society, at the group's Sept. 19 meeting. Other officers include (seated) Mrs. Warren Jones, secretary; Mrs. J. T. Latham, northern area vice president; (standing) A. Ray Tillman, treasurer; Dr. Frank A. Wood, Executive Committee member-at-large; Joseph W. Carson, chairman, board of directors, and George Altbach, southern area vice president.

Professional members named to the board of directors include Dr. J. G. McKinnon, Hattiesburg; Dr. John G. Archer, Greenville; Dr. A. V. Beacham, Magnolia; Dr. Forrest G. Bratley, Jackson; Dr. Richard G. Burman, Gulfport; Dr. Guy T. Gillespie, Jr., Jackson; Dr. Glen T. Pearson, Hattiesburg; Dr. Augustus Street, Vicksburg, and Dr. O. P. Stone, Ripley.

During their daylong annual meeting volunteers of the Mississippi Division, ACS, heard two featured speakers. Edward Khayat, vice president of the Pascagoula-Moss Point Bank and the Jackson County Board of Supervisors, paid tribute to the efforts of the volunteer worker in an address entitled "The Year of the Volunteer." Dr. L. W. Diggs, professor of medicine in the Division of Hematology and Laboratory Medicine, University of Tennessee, told the volunteers about the latest scientific developments made in leukemia research

studies. Mr. Khayat addressed the morning session, and Dr. Diggs spoke to the luncheon meeting.

The 1963 annual meeting was concluded with an afternoon session of panel discussions on county level programs.

Medical School Professor Receives NIH Grant

Dr. Jimmy B. Langston, assistant professor of physiology and biophysics, is the fourth member of the University of Mississippi School of Medicine faculty to receive a Research Career Development Award from the National Institutes of Health.

Dr. Langston's research investigations concern problems of renal hemodynamics, experimental hypertension, and the effect of blood volume changes in various circulatory parameters. He returned to the university this fall after spending the last academic year at the University of Gothenborg, Sweden, on a postdoctoral fellowship.

The 36-year-old physiologist is a graduate of Delta State College and received his M.S. and Ph.D. degrees from the graduate school at the University of Mississippi.

Previous NIH Career awards have gone to Dr. Richard L. Klein, associate professor of pharmacology; Dr. Roger B. Arhelger, instructor in pathology, and Dr. Glenn Gentry, assistant professor of microbiology.

Blue Plans Raise Fees For Cancer Endorsement

The Mississippi Hospital and Medical Service, the state's Blue Cross-Blue Shield Plan, has announced a fee increase for the $5,000 revised Cancer and Catastrophic Illness Endorsement. Effective Nov. 1, the individual fee has been increased 45 cents and the family fee 90 cents monthly.

The cancer endorsement has always been offered to the Blue Cross-Blue Shield member on an optional basis and has no bearing on the enrollment requirements for basic coverage. Basic rates are not effected by this rate adjustment.

Richard C. Williams, president of Mississippi Hospital and Medical Service, commented in regard to the fee raise, "For sometime we have been concerned about the trend of benefit payments under the cancer endorsement. In order to enable us to continue complete and full coverage in almost all of the cases where cancer is diagnosed and treated, this nominal adjustment is necessary."

In 1961 and 1962 Blue Cross-Blue Shield paid out considerably more in cancer benefits than were received in subscriber's fees.

Some of the reasons given for benefits for cancer cases running into the thousands of dollars are: (1) hospital confinements consistently run above average in length of stay and in extent of hospital services required, (2) physicians' services for surgery, except for skin cancers, are nearly always of a major nature and charges for medical care run high, (3) private duty nursing care is widely used in cancer cases and out-of-hospital drugs and services are often a major expense.

Blue Cross-Blue Shield has also announced that due to the great number of requests for more protection against the high cost of care for dread diseases a $10,000 Cancer and Catastrophic Illness Endorsement has been designed and will be offered to the membership.

Dr. A. Street Awarded Fifty Year Club Insignia

During the Oct. 8 meeting of the West Mississippi Medical Society, Dr. A. Street of Vicksburg was awarded the Fifty Year Club pin and plaque. Dr. John G. Archer of Greenville, MSMA president, made the presentation.

Dr. Street began his practice in 1916 when he joined his brothers, the late Drs. George M. and D. P. Street, in the Vicksburg Sanitarium, the



Dr. John G. Archer, left, MSMA president, presents a certificate of membership in the Fifty Year Club to Dr. A. Street of Vicksburg. The presentation was made during the Oct. 8 meeting of the West Mississippi Medical Society.

first privately owned hospital established in the state. The Sanitarium was the forerunner to the Mercy Hospital-Street Memorial and the Street Clinic.

A 1913 graduate of Columbia University Medical School, Dr. Street interned at Roosevelt Hospital, New York, N. Y. He was certified by the American Board of Surgery in 1945.

Dr. Street served as MSMA president in 1941 and is a member of AMA, the American College of Surgeons, the Southern Medical Association, and the Southeastern Surgical Congress.

Circuit Courses Slated For Tupelo and Greenwood

The Circuit Courses of the University of Mississippi School of Medicine will swing north to Tupelo and Greenwood on Nov. 6 and 7 for the third session in the 1963-64 series.

Lecturers from the Department of Pediatrics and the Department of Obstetrics and Gynecology will meet with Tupelo physicians on Nov. 6. Speakers scheduled are Dr. Lois Mosey, assistant professor, and Dr. John Kitchings, clinical instructor, from the Department of Obstetrics and Gynecology, and Dr. Wilfred Q. Cole, clinical assistant professor, and Dr. Nell Ryan, instructor, from the Department of Pediatrics. Subjects to be discussed are toxemia of pregnancy, analgesia and anesthesia in obstetrics, home management of cystic fibrosis, and juvenile rheumatoid disease.

The Tupelo meeting will begin at 7:30 p.m. in the North Mississippi Community Hospital. Reservations may be made with Dr. F. K. Tatum or Dr. Malcolm S. Moore.

On Nov. 6 the same speakers will meet with Greenwood physicians at the Travel Inn. Dr. Howard Nelson is in charge of local arrangements.

The northern circuit courses opened in October. The first session concerned new developments in anesthesiology, urology, and orthopedic surgery, while the second session featured speakers from the Departments of Medicine and Psychiatry.

On the Southern Circuit, sessions will be held in Laurel at the Jones County Community Hospital on Nov. 4, Jan. 6, and March 2. Meeting time will be 7:30 p.m.

In the other two Southern Circuit cities, Biloxi and Hattiesburg, the three sessions are scheduled at weekly intervals beginning Jan. 15, 1964.

On the Central Circuit, Centreville and Meridian will host the university lecturers beginning March 4.

The Mississippi State Medical Association and the Mississippi Academy of General Practice cooperate with the University of Mississippi in presenting the Circuit Course series, now entering its fifth year. Expenses are paid from a grant from E. R. Squibb and Sons. The Academy grants 11 hours of credit for full attendance.

State ACS Chapter Hears Pediatric Surgeons

Two prominent pediatric surgeons served as guest speakers for the Oct. 11 annual meeting of the Mississippi Chapter, American College of Surgeons.

Dr. Rowena Spencer, assistant professor of surgery, Louisiana State University School of Medicine, New Orleans, spoke to the Jackson gathering of state surgeons on "Rectal Bleeding in Infants and Children."

A professor of pediatric surgery at the University of Pittsburgh School of Medicine, Dr. William B. Kiesewetter, addressed the group on "Imperforate Anus—Management and Results."

Dr. Spencer and Dr. Kiesewetter served as consultants for an afternoon case presentation clinic. State physicians participating in the clinic were Drs. Dawson B. Conerly of Hattiesburg; Bedford F. Floyd of Gulfport; J. Henry Holleman of Columbus; Raymond S. Martin, Jr., of Jackson, and Richard F. Riley of Meridian.

Luncheon speaker for the daylong meeting was Dr. James H. Spencer of Chicago, assistant direc-



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"Is her chart filed in the fiction or non-fiction section?"

tor, American College of Surgeons. A Laurel orthopedic surgeon, Dr. James C. Bass, Jr., addressed the meeting on "Fractures in Children."

At the closing business meeting, the Mississippi Chapter elevated Dr. Richard J. Field, Jr., of Centreville to the presidency and named Dr. George Archer of Greenville president-elect. Dr. William O. Barnett of Jackson was elected secretary-treasurer to fill the unexpired term of Dr. Curtis P. Artz, who has accepted a position with the University of Texas Medical Branch, Galveston, as of Nov. 1. Dr. William L. Thornton of Meridian, immediate past president, was named to the council. Other council members are Dr. G. Swink Hicks of Natchez and Dr. Jack V. King of Jackson.

U. S. Flying Physicians Name Jackson Doctors to Office

Two Jackson doctors were named officers in the U. S. Flying Physicians Association during the group's eighth annual meeting in Aurora, Ill.

Dr. Curtis W. Caine, an anesthesiologist, was named secretary of the national group, a position he actually filled six months ago when the incumbent secretary resigned. Dr. Samuel B. Johnson, an ophthalmologist, was named a vice president by the flying physicians.

Dr. Caine has served the national organization as a vice president and as a member of the Board of Directors. Active also in the Mississippi Chapter of the Flying Physicians, Dr. Caine served that group as president in 1962-63 and as secretary in 1961-62. He is now Disaster Chairman for the state association.

Dr. Johnson was secretary of the Mississippi organization in 1962-63 and has previously served as a vice president of the national group.

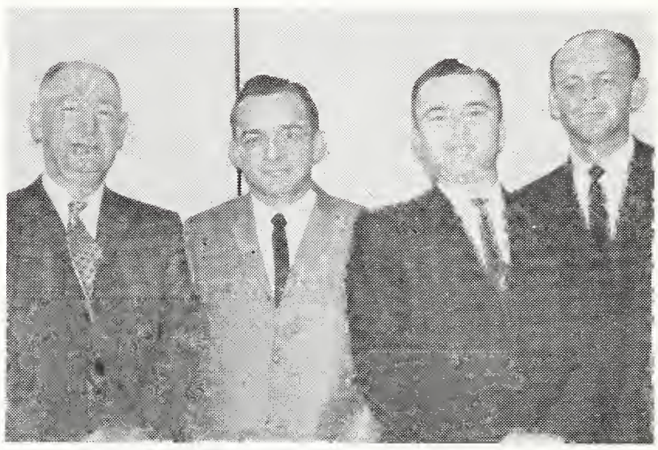
Organized in 1955, the Flying Physicians Association has as its broad purposes (1) to promote general aviation safety by example and teaching, (2) to stimulate advanced pilot proficiency and knowledge in its membership, (3) to stimulate aviation consciousness and acceptance in youth, (4) to encourage aviation activities and consciousness within the medical and professional ranks, and (5) to cooperate with civilian agencies concerned with the welfare of the country.

Membership in the FPA is open to all duly licensed physicians who are members of the American Medical Association and who hold valid pilot certificates. The group now has some 1,500 members which Dr. Caine estimates at half the potential.

One of FPA's priority projects is its disaster program. During the recent Aurora meeting, the group conducted a practice session in disaster medicine. Flying on to Chicago's Midway Airport, they participated in an Aero Medical Disaster Evacuation demonstration staged jointly by the association and the U. S. Air Force. The group has also established an emergency mobilization plan organized on a state-by-state basis.

The Mississippi Chapter of the Flying Physicians Association has around 26 members. Current officers are Dr. Richard F. Riley of Meridian, president, and Dr. James Royals of Jackson, secretary.

West Society Elects Dr. Allison President



Dr. J. W. Allison, second from right, was named president at the Oct. 8 meeting of the West Mississippi Medical Society. Other officers elected were Dr. J. A. K. Birchett, MSMA delegate, left, and Dr. Patrick G. McLain, secretary, second from left. Dr. Tom Mitchell, far right, is outgoing secretary. Not shown are Dr. Robert Ivy, newly elected vice president, and Dr. Fred Hamernik, outgoing president. All are from Vicksburg. Dr. James D. Hardy, professor and chairman, Department of Surgery, University of Mississippi School of Medicine, was the guest speaker for the meeting. His topic was transplantation of human organs.

ACS Plans Meet For Surgeons and Nurses

Surgeons and graduate nurses are invited to the tenth annual joint meeting of the American College of Surgeons in New Orleans, March 16-19, 1964. Headquarters hotel for doctors will be the Roosevelt, and for nurses the Jung.

This is the College's only four-day meeting for 1964, and the only meeting with a program for

nurses. This joint meeting pioneered in Cleveland in 1955 and has been a success ever since.

Scope of the meeting approaches that of the annual Clinical Congress. Doctors sessions will be held in general surgery and in the specialties of gynecology and obstetrics, ophthalmic surgery, otolaryngology, urology, proctology, neurologic, orthopedic, plastic, and thoracic surgery. There will be daily "How I Do It" nonoperative clinics—educational demonstrations by surgeons noted for specific techniques, scientific papers, panel discussions, selected films, and industrial exhibits of interest.

Dr. Isidore Cohn, Jr., is chairman of the local advisory committee on arrangements. Miss Myrtle A. Olstad, R.N., is chairman of the nurses' planning committee. Panel discussions will be held with doctors and nurses sharing the rostrum in discussions of mutual problems.

Medical School Gets New 'Highway'

Jacksonians were surprised to wake one hot summer morning and find Project No. S.P.O.M.-5418 (2) of the Mississippi State Highway Department being built right through the grounds of the University of Mississippi School of Medicine. Contractors and engineers were fast at work on what looked like a five-lane throughway heading directly for the medical school's first floor.

Now completed, however, the construction can be seen for what it really is—a revised system of internal roadways for the campus. The roadwork was designed and built by the State Highway Department as all university grounds are state owned.

According to university spokesmen, the new system was necessary to help the traffic flow through the campus, to reduce congestion on the grounds, and to provide a safe access to the stadium parking across North State St. from the university. Cost of the construction was estimated at $30,000.

Opened around Oct. 21, the revised system closes the North State St. entrance near the School of Nursing and gives access to the grounds directly across from Stadium Drive. The entrance leading into the south campus has been made one way admitting only incoming traffic. All traffic leaving the campus must use the new center route. The city has installed traffic lights at the center intersection to permit pedestrians to cross North State and to eliminate the morning and afternoon traffic jams.

In addition to allowing better traffic flow through the campus, the new roadway system is expected to reduce the parking dilemma by allowing safe access to the stadium parking area.





Prior to the opening of the new roadway system at the University of Mississippi School of Medicine, traffic going in or out of the grounds during rush hours faced a formidable flow of cars on North State Street. The picture on the left shows a typical five o'clock packup. On the right, state road workers are leveling off what looks like a multilane throughway headed directly for the medical school in the background. Now completed, it is actually an internal roadway system allowing a smoother and safer flow of traffic through the grounds. Cost of the construction was estimated at $30,000.

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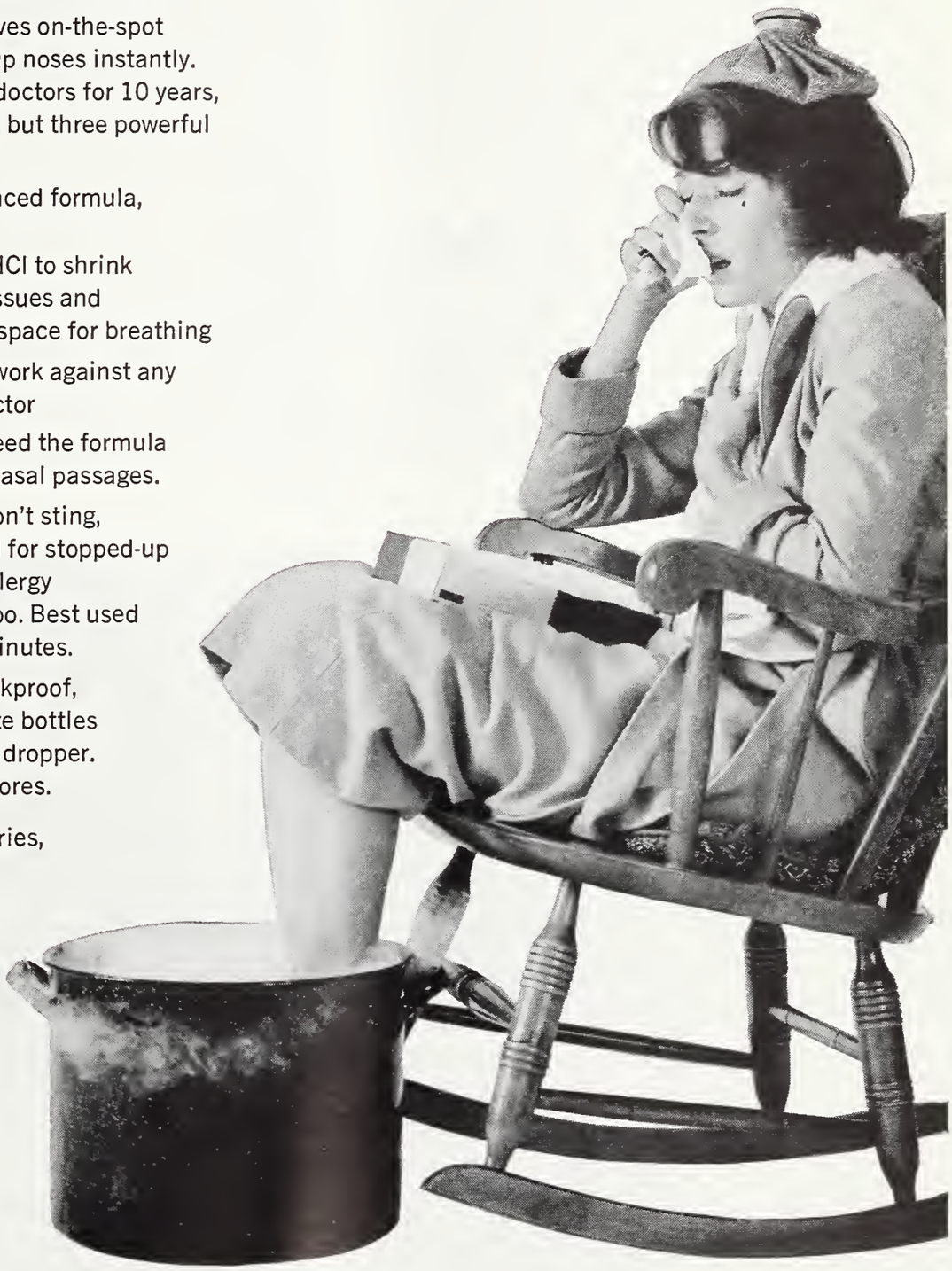
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Genes and Immunity to Be Highlight of AMA Meeting

An outstanding feature of the 17th Clinical Meeting of the American Medical Association Dec. 1-4 at Portland, Ore., will be a symposium on "Genes, Chromosomes, and Immune Mechanisms."

The symposium will be held on Monday, Dec. 2, the second day of the meeting. The same subject will be covered in a guest lecture on Tuesday morning by Rupert E. Billingham, Ph.D., of the Wistar Institute, Philadelphia, a world authority on tissue immunity. He collaborated with Peter Brian Medawar of London who won the Nobel Prize in Medicine in 1960.

Dr. Medawar received the Nobel Prize for his distinguished contributions to the baffling but highly promising field of tissue transplantation and acquired immunologic tolerance. His main work was concerned with problems of tissue grafting and with tissue inheritance and differentiation. In 1948, at the request of the Medical Research Council, he undertook, with Dr. Billingham and other associates, tissue grafting in cattle to determine the distinction between identical and nonidentical twins.

In the course of these and other investigations, he confirmed the theories of the noted Australian scientist, Sir Macfarlane Burnet, with whom he shared the Nobel Prize.

Joining in a panel discussion on genes, chromosomes, and immune diseases late Monday afternoon will be Drs. Robert Koler of Portland, moderator; Levin Grumbach, New York; Arno Motulsky, Seattle; Carl Pearson, Los Angeles, and Robert Blizzard, Baltimore.

Immunization, with special emphasis on the viruses, will be covered on Tuesday's program, along with cancer of the breast.

Outstanding authorities in the diagnosis and treatment of breast cancer will exchange ideas and discuss the newest forms of treatment. The physicians are Ian Macdonald and Richard Martin of the M. D. Anderson Hospital in Houston, and Dr. Maurice Lenz, emeritus professor of radiology at Columbia Presbyterian Hospital, New York.

Also on Tuesday a number of outstanding specialists will discuss the surgical aspects of infection. The doctors include William Kirby of Seattle; Jacob Fine of Boston, and Edwin J. Pulaski

Recent reports suggest...insulin and sulfonylureas may accelerate lipogenesis, fat accumulation, weight gain; thus appear to aggravate obesity in diabetics[1-5] *...serum "insulin" levels are often elevated in obese diabetics*[2,3,6] *...DBI (phenformin HCl) reduces high blood sugars, lowers elevated "insulin" levels, tends to reduce body weight toward normal.*[1,3,7-9]

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of Washington, D. C. They along with Dr. J. E. Dunphy of Portland, president-elect of the American College of Surgeons, will close this portion of a program with a panel discussion.

Another highlight of the scientific program will be a day-long program on Tuesday on kidney problems, including the newest thoughts on kidney acid-base control. A renal symposium will include an airing of the principles of intermittent dialysis as well as the socioeconomic problems associated with keeping such chronic uremic patients alive. Speakers and panel discussants include Drs. William B. Schwartz, Jr., Boston; Belding Scribner, S. T. Boen, and John S. Murray, all of Seattle.

Practical approaches to everyday problems in adolescent patients will be subject of another featured symposium. Subjects and speakers include: Evaluation of the Adolescent Patient, Dr. Frank H. Douglass, Seattle; Dermatology, Dr. J. L. Fromer, Boston; Nutrition, Dr. Felix P. Heald, Washington, D. C.; Growth, Dr. Solomon Kaplan, Los Angeles; Gynecologic Disorders, Dr. Janet McArthur, Boston; Social Habits, Dr. Adolph Christ, Seattle; The Adolescent Athlete, Dr. Donald B. Sloxum, Eugene, Oregon.

UT Surgical Head Addresses Alcorn Medical Club

Dr. Harwell Wilson of Memphis, head of the Department of Surgery at the University of Tennessee Medical School, was the principal scientific speaker for the Sept. 23 meeting of the Alcorn County Medical Club. Dr. Wilson's subject was "The Surgical Aspects of Jaundice."

Dr. Tom Wesson, secretary of the Northeast Medical Association, discussed "Better Medical Care for Mississippians." He told the club, "The Kerr-Mills plan for medical service will care adequately for the needy and near-needy, not only for the senior citizens above the age of 65, but for persons of all ages. The plan supplements voluntary health insurance already carried by the majority of the people of Mississippi."

The state medical association strongly supports the Kerr-Mills plan, continued Dr. Wesson, and is at present working to make it more effective in the state by amended legislation.

The meeting was held in Corinth.



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administered to ketoacidosis-resistant diabetics requiring hypoglycemic therapy: **A.** act to reduce high blood sugar without increasing fat synthesis or weight gain as insulin and sulfonylureas tend to do. **B.** do not increase already elevated endogenous insulin levels; may, indeed, act to restore more normal insulin levels. **C.** favor reduction of weight towards normal.

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Bibliography: 1. Williams, R. H.: Textbook of Endocrinology, Ed. 3, Saunders, Philadelphia, 1962, p. 610. 2. Gordon, E. S.: Metabolism 11:819, 1962. 3. Grodsky, G. M. et al.: Metabolism 12:278, 1963. 4. Sadow, H. S.: Metabolism 12:333, 1963. 5. West, K. M. and Tophoj, E.: Metabolism 10:689, 1961. 6. Yalow, R. S. and Berson, S. A.: Diabetes 9:254, 1960. 7. Weller, C. et al.: Scientific Exhibit, A.M.A., June 1962. 8. Weller, C. et al.: Metabolism 11:1134, 1962. 9. Radding, R. S. et al.: Metabolism 11:404, 1962.

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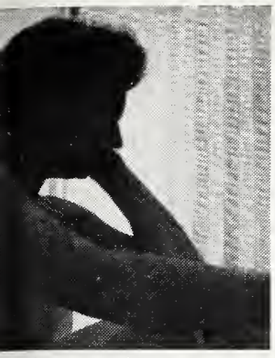
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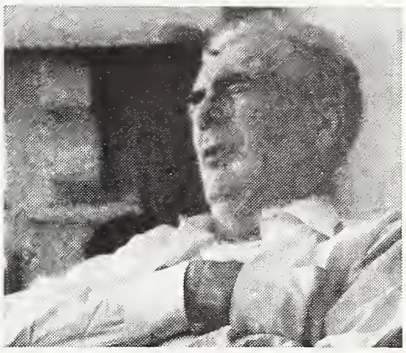
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The heart-disease patient



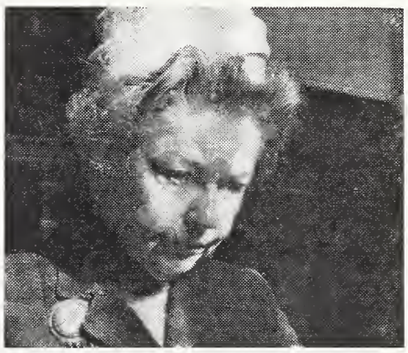
The surgical patient



rl with dermatosis



Tension headache



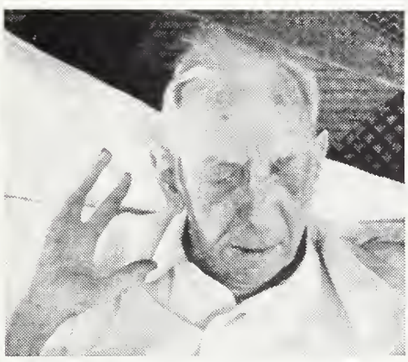
The woman in menopause



Anxious depression



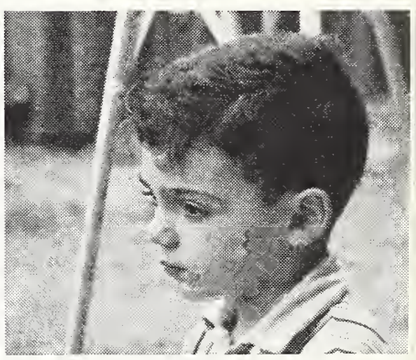
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MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Clinical Meeting, Dec. 1-4, 1963, Portland, Ore. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn, Chicago 10, Ill.

American College of Surgeons, Oct. 28-Nov. 1, 1963, San Francisco. Samuel P. Harbison, Secretary, 40 East Erie, Chicago 11, Ill.

American Academy of General Practice, April 11-16, 1964, Atlantic City, N. J. Mr. Mac F. Cahal, Volker Blvd. at Brookside, Kansas City 12, Mo.

Southern Medical Association, Nov. 18-21, 1963, New Orleans, La. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham 5, Ala.

STATE AND LOCAL

Mississippi State Medical Association, May 11-14, 1964, Jackson. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Amite-Wilkinson Counties Medical Society, First Tuesday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday Monthly, 6:30 p.m., Robert E. Lee Hotel, Jackson. Jim G. Hendrick, 800 Carlisle St., Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday March and First Wednesday November, 2:00 p.m., Clarksdale. Whitman B. Johnson, Jr., 422 McWilliams Building, Clarksdale, Secretary.

Coast Counties Medical Society, Second Wednesday, January, First Wednesday, March, May, July, September, November. Charles N. Floyd, 1619-23rd Ave., Gulfport, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. Robert M. Graham, 612 Dixie Towers, Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March and September. Robert B. Townes, Jr., 1196 Mound St., Grenada, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. Thomas W. Wesson, 420 Magazine, Tupelo, Secretary.

North Mississippi Medical Society, First Thursday April and October, Oxford. Marcus E. Morrison, 512 Van Buren Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucien Olen Crosby Memorial Hospital, Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. James C. Bass, Jr., 424-13th Ave., Laurel, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Tom H. Mitchell, The Street Clinic, Vicksburg, Secretary.

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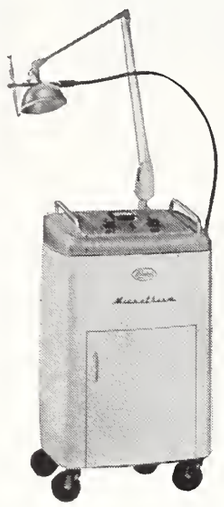
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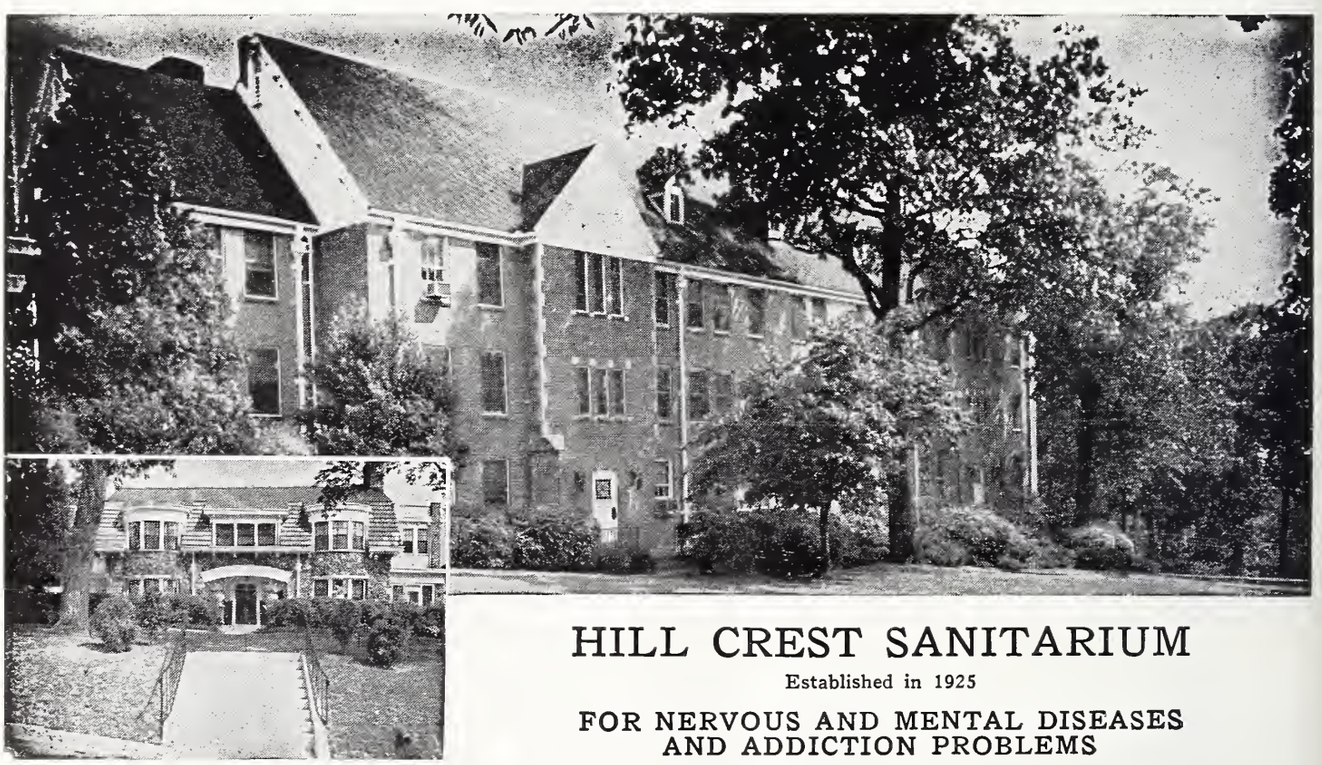
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Medical Women Schedule San Antonio Meet

The American Medical Women's Association will conduct its annual House of Delegates and Scientific Session Nov. 13-16, 1963, in San Antonio, Texas.

"More Doctors for the Future" is the title of the morning symposium of the Scientific Assembly which is set for Nov. 16. Dean Rosemary Pierrel, Pembroke College; Dean Marian Fay, Woman's Medical College of Pennsylvania, and Dr. Elizabeth A. McGrew, University of Illinois College of Medicine, will present the picture from their respective viewpoints. Medical students from Southwestern Medical School of the University of Texas will participate in a panel discussion of the same subject with their dean, Dr. A. J. Gill, and Dr. Rosa Lee Nemir, New York University School of Medicine, acting as co-moderators.

Dr. Robert Berson, dean of the newly organized South Texas Medical School of the University of Texas, and president-elect of the American Association of Medical Colleges, will be the luncheon speaker. His topic will be "The Education of Tomorrow's Doctors."



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Manuscripts should be typewritten, double spaced on one side of the paper. Tables, charts, and tabulations should be submitted on separate sheets but their position in the text should be indicated. Authors are encouraged to limit bibliographies to 10 references, written in conformation to style utilized in scientific publications of the American Medical Association. Articles are accepted for publication on the condition that they have not been previously published and are contributed solely to this JOURNAL.

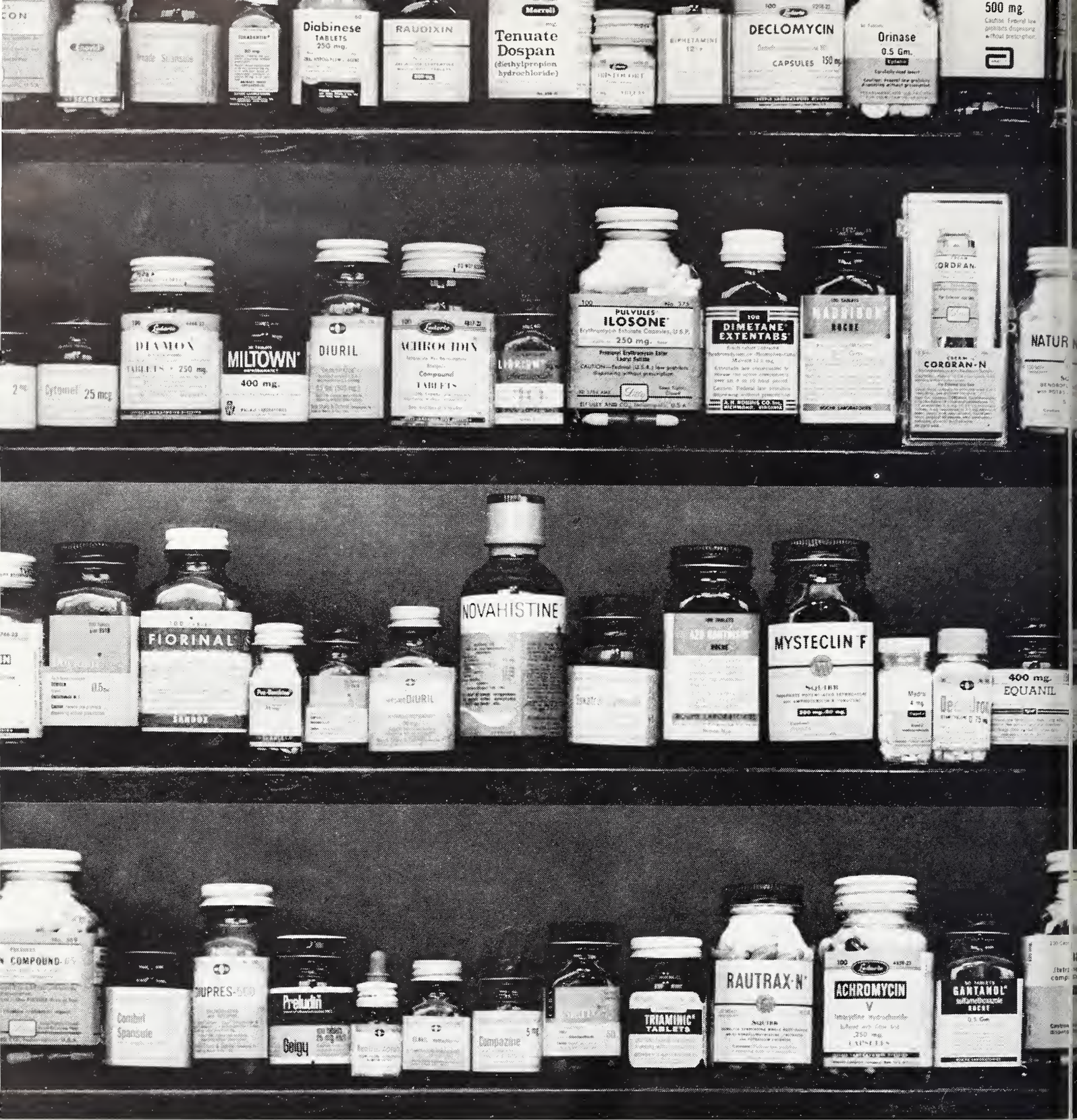
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Volume IV
Number 12
December 1963



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NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION
JACKSON, MISSISSIPPI

December 1963

Dear Doctor:

Fedicare proponents pulled every trick in the bag to prejudice hearings November 18-27 before the House Committee on Ways and Means. A study group headed by liberal Sen. Jacob Javits (R.,N.Y.) proposed a three-way program to be paid by Social Security, private insurance, and the individual to whom benefits would accrue. Billed as a "compromise," it is still fedicare in new clothing.

The liberal majority of the Senate Subcommittee on Health of the Elderly blasted Kerr-Mills two days before hearings opened. Minority members Goldwater, Dirksen, and Carlson answered blast, pointing to gains in voluntary health care financing for aged, labeling liberals "negative" in their attack.

A California supreme court decision may write a new chapter in workmen's compensation and redefine legal status of collegiate athletes. Recent test case awarded survivors of a Cal Polytechnic football player killed in 1960 air crash $20,500 in workmen's compensation benefits, holding that "he was in pursuance of his job" at time of death. Team members killed had usual grants-in-aid scholarships which court held to be salaries.

Milady's status symbol has a new scientific status, so say researchers for the American Heart Association. The blue mink, an ill-tempered critter, is subject to "Aleutian disease," found to be similar to connective tissue diseases in man. Investigators hope to discover more about arthritis and rheumatic fever by studying the rare and valuable animal.

The long arm of the federal government is reaching into the technical exhibits in medical meetings. New FDA edict requires that fixed prescription drug exhibits meet the same "full disclosure" minimums as ethical advertising and labeling.

Promoters of Krebiozen say they will continue "research," despite near-universal proclamation that the substance is worthless fraud. Newest development is possible criminal prosecution of promoters, Drs. A. C. Ivy and Stevan Durovic, following closed hearings at Chicago.

Sincerely,

Rowland B. Kennedy
Executive Secretary

DATELINE - MEDICAL AMERICA

SBH Begins Study Of Fire Deaths

Jackson - A pilot study in four counties by the State Board of Health will seek reasons why Mississippi has the second highest death rate in U.S. from deaths by fire and explosions. Final totals for 1962 showed 217 such tragedies in state. Counties in study are Hinds, Warren, Yazoo, Lauderdale, chosen for urban-rural characteristics, proximity to each other, and high fire death rates. Concomitant public education program stressing safety and prevention is being initiated.

Biomedical Computer Center Will Study Life Sciences

Cambridge, Mass. - A $2.8 million center for biomedical research with computers has been established at the Massachusetts Institute of Technology. Advanced studies will develop programs in areas of biomedical-life sciences where physicians and computer scientists have overlapping interests. Although MIT is host institution, 11 other universities are working in project.

OB Services 'Hold Cost Line' As Safety Increases

New York - When Mrs. Jane Doe has her baby, the chances are 97 out of 100 it will be born in hospital and 98 out of 100 that a physician will be in attendance. So say studies by the Health Insurance Institute which points out that costs of OB services have risen only 116 per cent since 1940, while index for all goods and services is up more than 210 in same period. Usual bills total about $300 for in-hospital delivery. Survival risks faced by mother and infant are just half those of two decades ago.

Quacks Compete With Congress On Quackery

Washington - AMA and government agencies, jointly sponsoring the Second National Congress on Medical Quackery last month, had ludicrous competition from the quacks themselves who simultaneously staged their First National Congress on Health Monopoly. Food faddists, device quacks, and assorted irregulars adopted resolutions seeking to stop AMA and FDA from "monopolizing nation's health services."

Auxiliary 'Elects' First Woman President Of U.S.

Chicago - Officers of state medical association Auxiliaries went into politics with help of AMPAC at their recent Fall Conference. Registrants were divided into two mythical political parties, the Capsules and Hot Shots, and "Carol Casey" defeated "Kathleen Kildare" in a hard-fought campaign for President of U.S. AMPAC staff members assisted Auxiliary members in what was described as useful, light-hearted political education.

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ORIGINAL PAPERS

The Treatment of Duodenal Ulcer by Vagotomy, Antrectomy, and Billroth I Anastomosis

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Vicksburg, Mississippi

In treating duodenal ulcer, the aim of all methods of surgical attack is the reduction or subtotal elimination of gastric acid secretion, without which peptic erosion does not occur. For the past 20 years, the most widely used operation has been an "adequate" (75 per cent) gastric resection in conjunction with a Billroth II, Polya, or Hofmeister gastrojejunostomy. Recently, however, newer operations have been developed, and at present there are four generally accepted operative procedures: (1) adequate (75 per cent) subtotal gastric resection, (2) vagotomy with drainage, (3) segmental gastric resection, and (4) vagotomy with antrectomy. The author compares these four procedures putting special emphasis on the combined operation of vagotomy-antrectomy with Shoemaker-Billroth I gastroduodenostomy. He concludes that this operation is the most physiologic approach to the duodenal ulcer problem.

FOR THE PAST 20 YEARS the most widely used operation for duodenal ulcer has been an "adequate" (75 per cent) gastric resection in conjunction with a Billroth II, Polya, or Hofmeister gastrojejunostomy. In recent years, however, the operation has lost some of its universal appeal as newer operations of lesser magnitude based on more sound physiologic principles have been developed.

There are at present four generally accepted operative procedures for the treatment of the complications of duodenal ulcer (Figure 1): (1) adequate (75 per cent) subtotal gastric resection, (2) vagotomy with drainage, (3) segmental gastric resection, (4) vagotomy with antrectomy.

ADEQUATE SUBTOTAL GASTRECTOMY

In order to effectively prevent recurrent ulceration, a subtotal gastrectomy must remove approximately 75 per cent of the acid-pepsin producing area of the stomach (Figure 2). This marked reduction in gastric reservoir leads to distressing post-gastrectomy symptoms in a significant number of patients. Weight loss, dumping syndrome, and nutritional anemia occur frequently enough to cause real concern. In spite of this radical approach to the benign ulcer problem the recurrence rate has remained at about 5 per cent. The operative mortality in large series of cases has

From the Department of Surgery, Street Clinic and Mercy Hospital-Street Memorial.
Read before the Section on Surgery, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 13-16, 1963.

varied from 1.5 to 4 per cent. In general the long range results are considered to be good in approximately 93 per cent of cases.

VAGOTOMY WITH DRAINAGE

In 1943 Dragstedt advocated vagotomy with dependent gastroenterostomy for peptic ulceration (Figure 3). Although the original enthusiasm for this operation has waned considerably due to the high incidence of recurrent ulceration (10 to 13 per cent), it is still a valuable operation in selected cases because of its technical simplicity and low mortality of 0.5 per cent.

More recently Weinberg[10] and Farris[2] have suggested vagotomy with pyloroplasty as an improvement over the Dragstedt procedure. While retaining the advantages of simplicity and low mortality the use of pyloroplasty instead of gastroenterostomy is said to reduce the antral stasis and lower the recurrence rate to 5 per cent.

SEGMENTAL GASTRIC RESECTION

Segmental gastrectomy has not been very popular outside the Minnesota group. Originally described by Mikulicz in 1897 this operation was reintroduced in 1949 by Wangensteen[9] (Figure 4). Basically the operation requires the removal of the greater portion of the parietal cell mass of the body and the fundus of the stomach, leaving a small portion of acid-producing mucosa in the cardia to inhibit secretion of gastrin by the antrum. In Wangensteen's operation, transection of the stomach denervates the antrum and requires a concomitant pyloroplasty. Ferguson[3] attempts to preserve the vagal fibers to the antrum and pylorus and omits the pyloroplasty. Berne[1] combined vagotomy with segmental resection and pyloroplasty.

Wangensteen originally used segmental resection to avoid dealing with the difficult duodenal stump. Obviously, this operation would not be ideal in patients with massive hemorrhage, perforation, or marked pyloric obstruction. The incidence of dumping syndrome is the same as that encountered in a three-fourths resection and the recurrent ulceration rate has been about 4 per cent. In Wangensteen's hands the operative mortality has been low (less than 2 per cent).

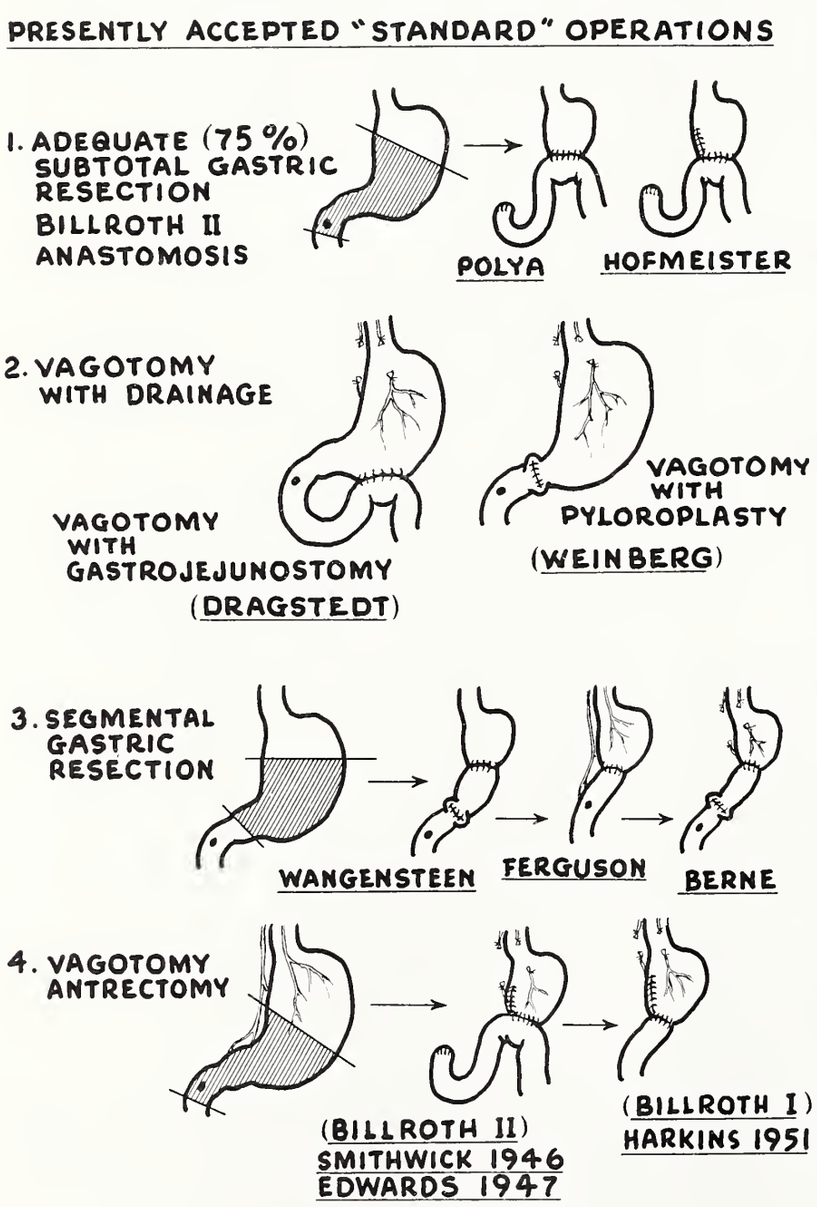


Figure 1.

VAGOTOMY-ANTRECTOMY-BILLROTH I

In 1946 Smithwick first performed a vagotomy and limited distal resection which he termed "hemigastrectomy." A few months later Edwards performed a similar operation which he called "antrectomy." In 1955 Harkins[5] adopted the combined operation (hemigastrectomy-vagotomy-gastroduodenostomy) as his standard procedure (Figure 5). Herrington[6] and his group are now able to report 1000 patients treated by vagotomy and antrectomy in the past 15 years.

The operation of pyloric resection followed by gastroduodenostomy was

first described by Billroth in 1881. Although anatomically sound, this operation was abandoned because of the high recurrence rate of gastroduodenal ulceration. Such a limited resection did not

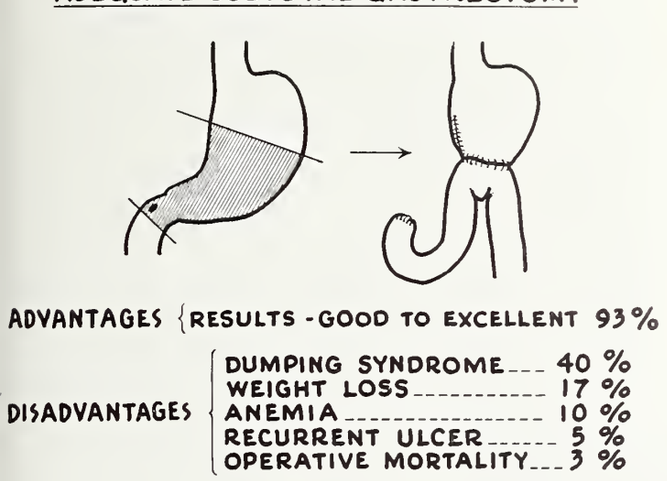


Figure 2.

remove an adequate amount of the acid-pepsin-producing portion of the stomach. With the development of the technique of abdominal vagotomy by Smithwick, Dragstedt, and others, there has evolved the combined operation. Thus the cephalic

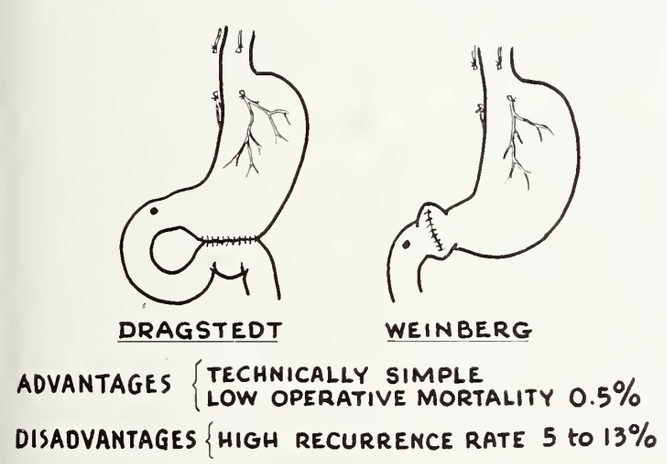


Figure 3.

phase of acid secretion is abolished by vagotomy and the gastric phase by antrectomy, while still maintaining an adequate gastric pouch.

INDICATIONS FOR COMBINED OPERATION

One of the advantages of the combined-Billroth I operation is that it can be used in any of the complications of duodenal ulcer, i.e., hemorrhage, perforation, obstruction, or intractability. One may rarely encounter the poor risk patient in which the simpler vagotomy-pyloroplasty is indicated. Occasionally, severe scarring and fixation of the duodenum will dictate the use of the combined-Billroth II procedure. However, most surgeons using the combined operation prefer the Billroth I procedure when feasible.

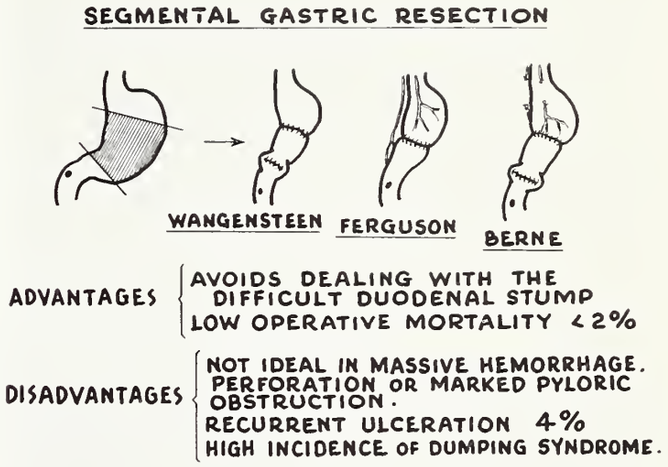


Figure 4.

Of all the operations presently used in the treatment of duodenal ulcer, vagotomy plus antral resection is the most effective means of reducing the free hydrochloric acid to near zero. This is substantiated by the lowest recurrence rate of all the acceptable standard operations (0.5 per cent for the combined operations as compared to 5 per cent for the three-fourths resection).

Although dumping syndrome occurs to some extent in any operation in which the pyloric

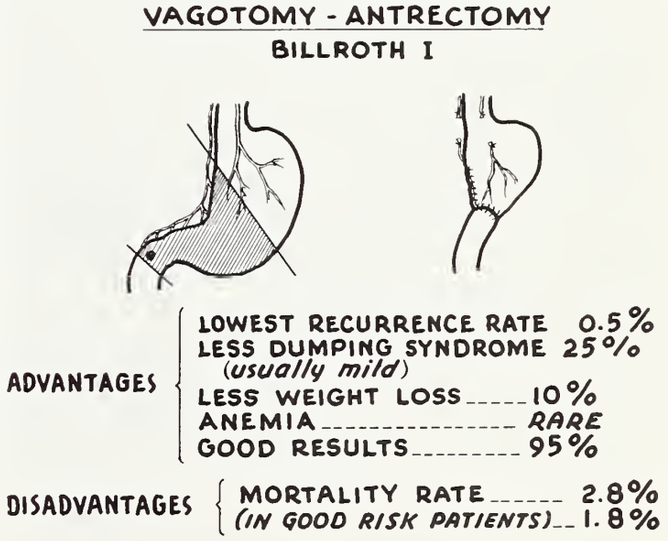


Figure 5.

sphincter is destroyed, in the combined-Billroth I operation it is usually mild and present in only 25 per cent of the cases. Anemia, weight loss, and poor nutritional states have not been a problem in the combined series. Herrington[6] reported 1000 cases of vagotomy and antral resection with 93 per cent good to excellent results, 5 per cent fair results, and only 2 per cent poor results.

The only disadvantage of the combined-Billroth I operation is the reported overall mortality rate of 2.8 per cent in large series of cases. If the poor risk cases are excluded, the mortality is 1.8 per cent. Herrington in a personal series of 500 cases reported a 1 per cent hospital mortality. Certainly these results compare favorably with those obtained following adequate (three-fourths) gastric resection.

TECHNIQUE OF OPERATION

In performing a successful combined operation certain criteria have evolved: (1) The vagotomy must be complete. This requires either total division of the right and left vagal trunks with any accessory branches, or as advocated by Griffith,[4] selective gastric vagotomy in which only the stomach is denervated. (2) The antrectomy must be adequate so that most of the lesser curvature of the stomach is removed together with 40 to 45 per cent of the distal gastric pouch. (3) In the light of present knowledge, the Shoemaker modification of the Billroth I anastomosis (greater curvature to duodenum) seems to be the operation of choice.

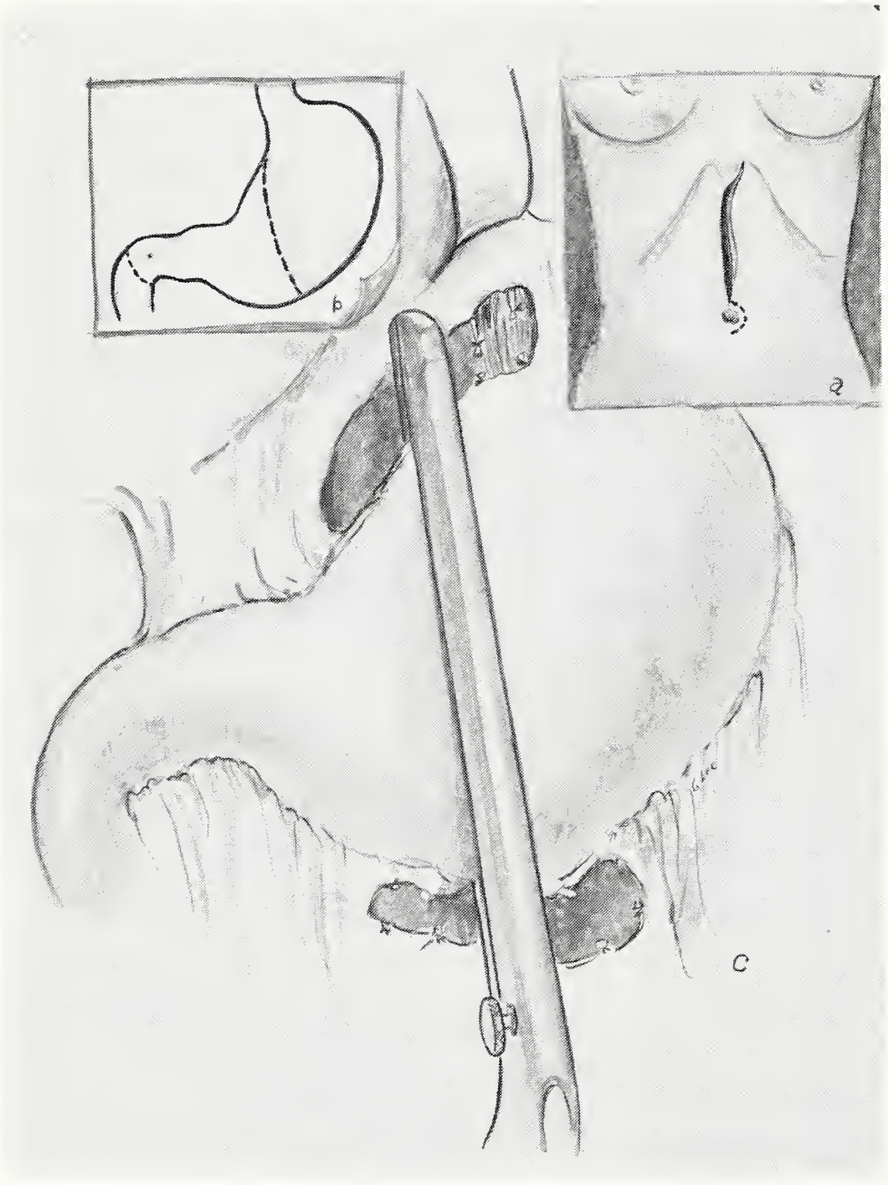


Figure 6. (a) Incision. (b) Extent of resection. (c) Bilateral truncal vagotomy has been performed. The Von Petz clamp is applied in an oblique manner so as to remove most of the lesser curvature.

The abdomen is opened through an upper midline incision extending from the left of the ensiform cartilage to the umbilicus. After thorough exploration of the abdominal contents, a bilateral truncal vagotomy is performed (Figure 6).

The suspensory ligament of the left lobe of the liver is divided in its avascular portion and the lobe retracted to the right. A transverse incision is made in the peritoneum overlying the esophagus just inferior to the esophageal hiatus of the diaphragm. The esophagus is then freed from the mediastinum and pulled into the abdomen. The vagal trunks will be felt as tight cord-like structures. The left vagus is smaller than the right and usually lies on the anterior surface of the esophagus. The right vagus is larger and lies posterio-medial to the esophagus. The vagal trunks are individually hooked with the index finger, clamped, divided and ligated, removing a 2 to 3 cm. section of each nerve. A diligent search is made for accessory branches which must be divided if found. After the nerve trunks are divided, the esophagus is allowed to retract into the mediastinum. No attempt is made to

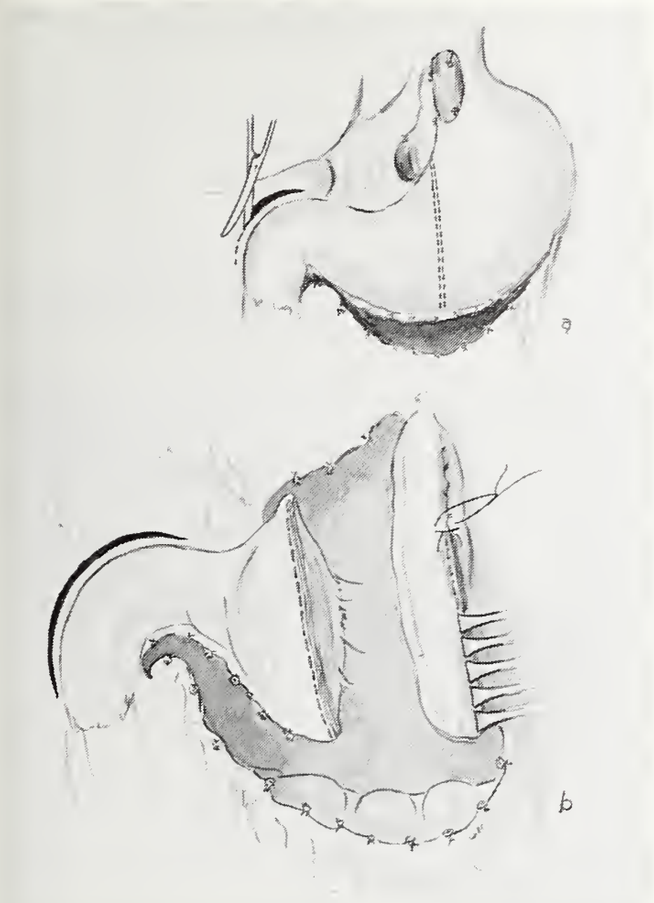


Figure 7. (a) Von Petz staples in place. The duodenum is mobilized by Kocher's maneuver. (b) The stomach is divided between the staples. The serosa of the stomach is sutured over the staples with 000 cotton. Allis clamps are left in place at site of later anastomosis.

reperitonealize the esophagus or to resuture the suspensory ligament of the liver.

The vascular arcade in the mid-portion of the greater curvature of the stomach is divided and ligated. The descending branch of the left gastric artery is triply clamped, divided, and ligated with transfixion sutures. The site of resection of the stomach is then selected so as to remove most of the lesser curvature. This requires that the gastric clamp be applied at an angle high on the lesser curvature and slightly distal to the mid-point of the greater curvature, thus resecting approximately 45 to 50 per cent of the stomach. The selected line of resection is clamped with a Von Petz's clamp and stapled. The stomach is divided between the two rows of staples and the proximal cut edge of the stomach clamped with a row of Allis forceps (Figure 7). A site of later anastomosis of the stomach to the duodenum along the inferior cut edge of the stomach is selected. This usually measures 4 to 5 cm. in length. The Allis clamps are left on this area but are removed along the upper cut edge of the stomach as the gastric serosa is closed over the Von Petz staples. This is accomplished with a single row of interrupted figure-of-eight 000 cotton sutures.

The distal portion of the transected stomach is then retracted to the right and the vascular pedicles to the distal stomach and duodenum divided. An attempt is made to dissect the posterior wall of the duodenum from the head of the pancreas well beyond the site of ulcer. In badly scarred posterior ulcers the use of the Strauss[5] maneuver has aided considerably in obtaining a clean-cut edge of duodenum for anastomosis.

By traction on the Allis clamp the proximal stomach is converted into a long thin tube which easily approximates the duodenum. A row of interrupted 000 cotton sutures is placed in the posterior wall of the stomach proximal to the

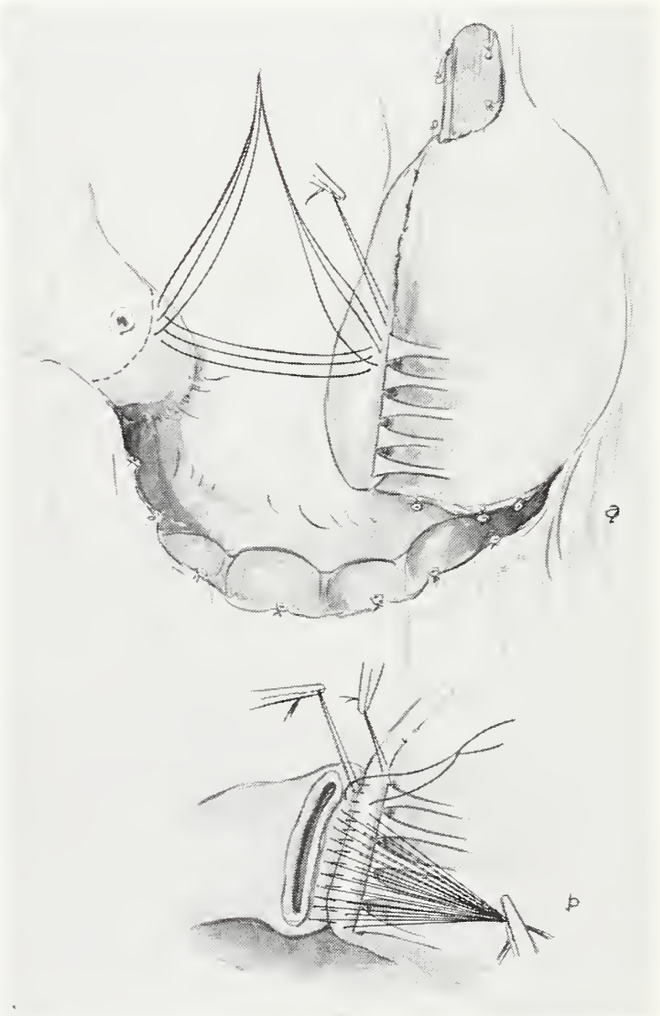


Figure 8. (a) A posterior row of 000 cotton is placed between the posterior wall of the stomach and the posterior surface of the duodenum, distal to the ulcer. (b) Posterior row of seromuscular sutures is tied, approximating stomach to duodenum.

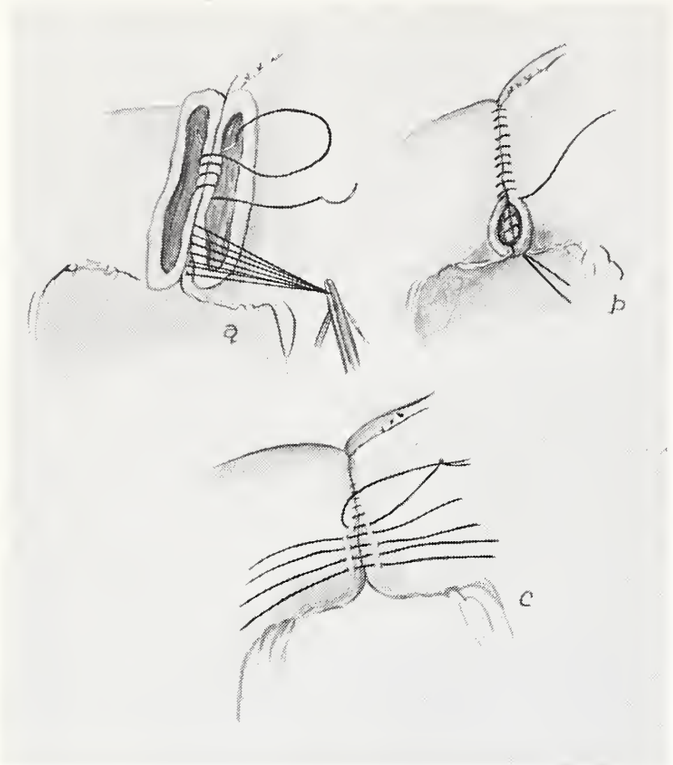


Figure 9. (a) The continuous suture of chromic catgut is begun posteriorly and brought anteriorly as a (Connell) inverting stitch. (b) Continuous suture is completed. (c) Anterior row of interrupted cotton completes the anastomosis.



Figure 10. Final appearance of completed anastomosis.

staples and into the posterior wall of the duodenum (Figure 8). After all the sutures are in place, but not tied, the staples are removed by resecting the cut edge of the stomach, and the duodenum is then transected proximal to the serosal sutures. An assistant applies traction to the sutures as they are tied to approximate the posterior wall of the stomach to the duodenum.

The anastomosis is completed by a continuous 00 chromic catgut suture begun posteriorly as an over and over stitch and continued anteriorly as an inverting (Connell) suture (Figure 9). A final anterior row of interrupted serosal sutures of 000 cotton is placed over the suture line.

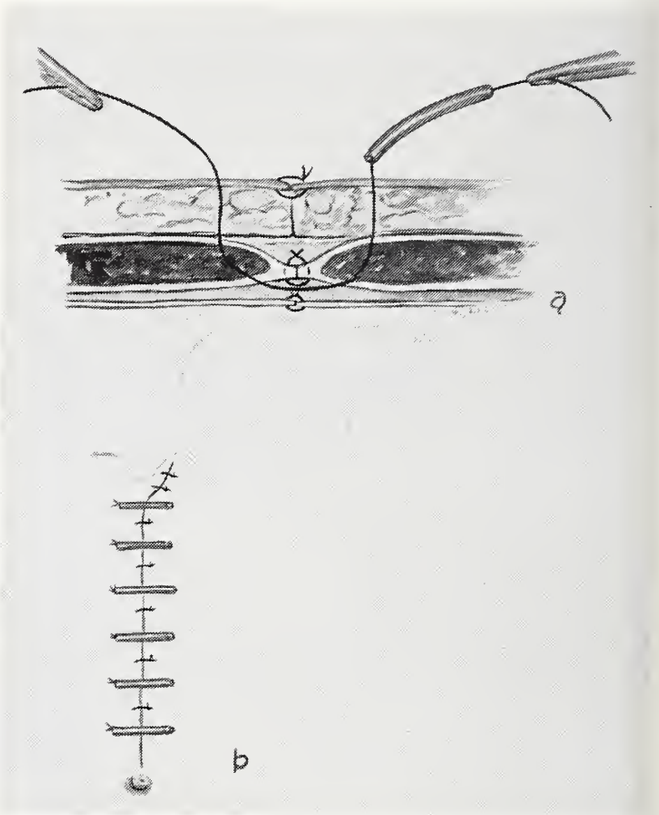


Figure 11. (a) The abdominal wound is closed in layers. Chromic catgut is used in the peritoneum and fascia. Through and through retention sutures are placed through all layers exterior to the peritoneum. (b) The retention sutures are tied over rubber "bumpers." The skin is closed with interrupted cotton sutures.

A final inspection is made (Figure 10). The anastomosis should admit the tips of two fingers. All major ligated vessels are checked for bleeding, and the omentum is placed between the anastomosis and the liver to prevent adhesions in this area. The abdomen is closed in layers with chromic catgut in the peritoneum, through and through retention sutures of Number 1 silk

through all layers except the peritoneum, and chromic catgut in the linea alba (Figure 11). The retention sutures are threaded on small rubber tubing "bumpers" and tied. The skin is closed with interrupted cotton sutures between the retention sutures.

SUMMARY

A comparison of the four generally accepted operations for the complications of duodenal ulcer has been discussed. Special emphasis has been placed on the combined operation of vagotomy-antrectomy with Shoemaker-Billroth I gastroduodenostomy. This operation appears to be the most physiologic approach to the duodenal ulcer problem.[7] It is attended with a lower incidence of weight loss, anemia, and dumping syndrome and results in the lowest recurrent ulcer rate of any operation presently used. ★★★

The Street Clinic

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DEFINITE IMPROVEMENT

"I understand that you've been going to a psychiatrist. Do you think it has helped you?"

"Certainly it has. Only a few weeks ago when the phone rang, I was deathly afraid to answer it. And now I go right ahead and answer it whether it rings or not."

Mississippi's Radiation Control Program

ROBERT R. RESTER
Jackson, Mississippi

The harnessing of nuclear energy for public use has brought with it a public hazard. The radiation exposure of today's population has been significantly raised by the increased use of radioactive materials and diagnostic and therapeutic x-ray and the fallout from nuclear weapons. To meet this potential problem, the Mississippi State Board of Health has developed a radiation control program under its new Radiological Health Unit. This program may be divided into three areas: environmental monitoring, x-ray evaluation, and radioactive material control. In this paper, the author, who is supervisor of the Radiological Health Unit, discusses these three areas and the present and future goals of the unit.

THE TREND TOWARD exploitation of nuclear energy makes it clear that man-made radiation-producing devices are a permanent addition to the hazards of human existence and well being. Much of our population is exposed daily, usually involuntarily, to radiation detectable only by sensitive instruments and recognized only by trained personnel. This radiation is known to produce deleterious changes in body tissue and hereditary material.

The multiplication of uses of radioactive materials, diagnostic and therapeutic x-ray, and fallout from nuclear weapons testing has significantly added to radiation exposure. Medical and industrial uses of radioactive materials have become commonplace and widespread. Important advances in diagnosis, based on radioactive isotope techniques, cannot be ignored if the practice of medicine is to keep pace with the times. Radiation technology has tremendously benefited industrial processes and economy, and consequently, educational institutions must utilize nuclear materials in preparing students to cope with this relatively new science. In line with these advancements, the use of radiation has increased over 700 per cent in Mississippi during the last five years.

One of the most important aspects of a good public health or preventive medical program is the recognition of a potential hazard and the development of precautionary control measures. The State Board of Health has taken necessary steps toward the development of a radiation control program compatible with the problem. The administration of this statewide program has been assigned to the Board of Health's Radiological Health Unit with direct responsibility to the executive officer, Dr. A. L. Gray.

Mississippi's radiation control program can be divided into three main features: environmental monitoring, x-ray evaluation, and radioactive material control.

ENVIRONMENTAL MONITORING

At present, the primary concerns of environmental monitoring are existing nuclear facilities, operation of fallout stations, and submission of environmental samples for radioanalysis. Much has been learned about the biological effects of heavy exposure to radiation through studying individuals who have received large amounts of radiation from accidental consumption of radium or from overexposure to x-ray, and by extensive research on animals. They may include somatic effects such as leukemia, some other forms of can-

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Read before the Section on Preventive Medicine, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 13-16, 1963.

cer, or shortened life expectancy. Another effect that has been observed in the descendants of animals given heavy and prolonged exposure is that of genetic damage ranging from inconsequential to very serious health effects in subsequent generations.

On the other hand, very little is known about the effects on animals or humans from very low but prolonged exposure such as from natural background, radioactive industrial wastes, or fallout from nuclear detonations. The consensus of scientific opinion is that the most prudent course is to assume that there is no level of radiation below which one can be absolutely certain that harmful effects may not occur.

The present levels of radioactive fallout present no significant external radiation hazard. Our primary concern is directed toward the ingestion of four nuclides included in fallout debris. They are I^{131} with a half-life of eight days, which deposits in the thyroid gland, Sr^{89} with a half-life of 53 days with deposition in the bone, Sr^{90}, which has a half-life of 27 years and also deposits in the bone, and Cs^{137}, which has a half-life of 33 years and is assimilated by the whole body.

The Federal Radiation Council has developed radiation protection guides which specify ranges for action based on the concentrations of these materials in fallout. For example, range one for I^{131} is based on the intake of 0 to 10 micromicrocuries per liter of milk per day averaged for one year. The action to be taken is that of continuation of routine surveillance. Range two varies from 10 to 100 micromicrocuries per day intake and requires that a more detailed surveillance and analysis be performed. Range three occurs when the content of I^{131} is within the average range of 100 to 1,000 micromicrocuries per day per liter of milk. At that time, control measures designed to limit the intake of the contaminated milk must be considered.

Still considering I^{131} as the example, control measures might include the placing of cattle on stored forage not contaminated by fallout debris and the diversion of fluid milk so as to allow opportunity for decay of the iodine. In addition, some study has been performed to determine the feasibility of increasing the nonradioactive iodine intake so as to act as a block to the I^{131}. This latter procedure has not been fully approved, however, due to the unknown toxic effects that may be produced by massive ingestion of nonradioactive iodine.

Similar, though more drastic actions, would be required for the longer-lived materials such as Sr^{89}, Sr^{90}, and Cs^{137}. It is interesting to note that at the present time, with the exception of New Orleans, the Jackson milk samples exhibit the highest concentrations of Sr^{89} in the country.

The method utilized in accounting for the accumulated internal exposure due to the ingestion of fallout debris provides ample opportunity for implementing action designed to deter the ingestion of harmful amounts of contaminated debris.

X-RAY EVALUATION

The x-ray evaluation program of the Radiological Health Unit concerns more population exposure than any other source of radiation.

Early in 1961, meetings were held with representatives of the medical association and dental society to determine the feasibility of conducting a statewide x-ray evaluation program. The intent of the program was to provide an evaluation survey to every x-ray owner. This service was designed to detect any deficiencies in the x-ray machines and did not involve the technique or the diagnostic or therapeutic procedures of medical practice. It was felt that not only was special training required to perform such an evaluation, but the cost of test equipment involved would prove to be prohibitive to the individual practitioner.

After it was established that such a program could be designed with the cooperative efforts of physicians, dentists, and the State Board of Health, inspections were performed first in the county health departments. This was the decision of Dr. Gray, who felt that the health department should sweep under its own doorstep before asking anyone else to sweep under theirs.

After completing the health department survey, work was begun with the dentists. The dentists were chosen for the unit's first encounter with the health professions because:

1. The machines were simple and easy to inspect.
2. The time required for the inspection was much less than that for a medical diagnostic unit.
3. The dental units were more concentrated.

After a pilot survey of 106 personal inspections in Jackson, the data was presented to an executive session of the Mississippi Dental Association. The data, based on this pilot survey, indicated to this particular committee that a statewide dental program was definitely indicated, and they wholeheartedly endorsed the proposal.

In order to get a general idea of how physicians felt about the program, 100 pilot letters were mailed to randomly selected doctors throughout

the state. In this letter the proposal was explained, and the physicians were asked if they would be interested in a radiation safety survey. As a direct result of these 100 letters and various medical meetings, over 600 requests were received for the survey. From this response, it was judged that the x-ray program could be effectively conducted in the medical field.

One thing that definitely enhanced the program was the fact that the unit not only conducted inspections but also performed radiological repairs. These repairs consist of adding filtration to the units when it was found to be necessary, repairing frayed cables when they presented a hazard, installing collimators, tightening nuts and bolts, and intercepting oil leaks before they presented a burnout hazard to the tube.

In order to divide up what possibly could be a never-ending program, it was separated into two phases. The first goal was the completion of a statewide x-ray evaluation program. This phase included checking every known medical x-ray machine in the state operated by a licensed practitioner. The unit hoped to accomplish three things during this phase:

1. To get the equipment in as good a shape "safety wise" as possible.
2. To educate operators and technicians through explanation and demonstrations.
3. To determine exactly where the majority of medical radiation exposure lay for the total population pool of Mississippi.

This first phase of the x-ray evaluation program has now been completed. Exactly 22 months after the inauguration of the plan, the State Board of Health had checked 2,281 units for an average of over one hundred per month. Even under the simple criteria established by the board of health, a significant percentage of the machines did not pass inspection. Items checked for included:

1. Proper coning and availability of cones
2. Adequate filtration
3. Properly operating exposure switches
4. Beam sizes on both fluoroscopic and radiographic units
5. Panel-top dose rates on fluoroscopes
6. Scatter radiation to operators and others
7. Proper shielding of x-ray tube
8. Cassette mountings to insure against accidental uncontrolled area exposures
9. Beam quality and other items of interest to the owner

One of the most significant things discovered in this entire inspection program was that over 82 per cent of the total exposure to medical x-ray occurs in the hospitals and clinics and only about 18 per cent is attributable to the x-ray equipment of private physicians. It was also found that although only one-third of the 1,677 practicing physicians in the state own x-ray equipment, the number of units averages out to almost one per practicing physician, and in the case of dentists, the average is a little better than one per practitioner. Specifically, there are 1,677 listed physicians in the state and 1,671 medical diagnostic x-ray units known to the health department. There are 566 practicing dentists and 610 dental units, according to health department records. Of the 145 hospitals in the state, there is an average of 3.9 x-ray units per hospital.

Since the unit has completed the "first phase" of the statewide x-ray evaluation program—what now? First, it is felt that a comprehensive job was done on the first round, and a lot of time could be wasted by resurveying good facilities. However, the work done could soon be forgotten, and in a short time, the situation could be back to where it was two years ago. Therefore, it seems that a logical course to follow would include:

1. A practical set of regulations pertaining to x-ray equipment and installation of this equipment. X-ray companies should be required to include certain necessary safety equipment in a bid rather than treating it as an accessory for the device. These regulations should include features aimed at protecting physicians and dentists legally as well as from radiation hazards. The legal implications in the use of ionizing radiation are more far reaching now than even a few years ago.
2. A periodic inspection of hospitals and clinics since better than 80 per cent of the medical genetic exposure for the Mississippi population pool occurs here. This period of inspection should not exceed two years.
3. Continued service to *new* installations on an annual basis. The Radiological Health Unit is informed of new physicians in the state by the Mississippi State Medical Association, and the unit's relationship with x-ray distributors requires that it be notified when new equipment is installed or when present equipment is rearranged.
4. Continued response to requests for surveys from physicians and dentists who would like to have their equipment checked periodically. The unit averages about ten such requests a month.
5. Continued provision of evaluation, collimators, filtration, and installation at no charge.

6. Evaluation of proposed diagnostic x-ray installations and assistance with their design. The unit has performed over 20 of these in the last two years.

RADIOACTIVE MATERIAL CONTROL

The third phase of the unit's program is that of radioactive material control. This includes the licensure and surveillance of radioactive materials previously regulated by the U. S. Atomic Energy Commission. This program is of prime importance because of the legal aspects. Until 1959, the AEC had assumed a monopoly over the production and utilization of byproduct, source, and special nuclear materials created through the process of developing nuclear weapons. The commission was forced to develop its own regulatory program due to the fact that it created the problem, and wartime security prohibited other agencies from becoming involved in the program.

The intent of the Atomic Energy Commission is that of development and promotion and not to serve as a public health or regulatory agency. Therefore, in 1959, Congress passed Public Law 86-373 which amended the Atomic Energy Act and made it possible for the several states to enter into an agreement with the federal government and transfer the responsibility for licensure and regulation of radioactive materials to a state level. This transfer of responsibility may be effected between the governor of a state and the AEC when:

1. The state develops a program based on criteria furnished by the commission,
2. The program is scrutinized and deemed to be compatible with that of the AEC, and
3. The governor expresses a desire for the legal transfer of authority from the federal to the state level.

Believing that a state radiation control program would be a good thing for Mississippi, Governor Ross Barnett and Dr. Gray agreed to seek ultimate transfer of radiation control responsibility to the state level. After concluding that necessary regulations could be adopted in conformity with state and federal requirements and that the state could develop a radiation control program that would be acceptable to the Atomic Energy Commission, the State Board of Health initiated a program necessary to implement the transfer of authority. After 18 months, this transfer agreement was signed during May and became effective July 1, 1962. Mississippi thus became the third state to sign the agreement with the commission and the second state to actually begin the program. Kentucky and California had previously assumed the responsibility prior to Mississippi, and since Mississippi's agreement, the states of New York and Texas have executed the transfer and initiated their programs.

Mississippi's decision to assume regulatory responsibility over byproduct, source, and special nuclear materials in quantities less than a critical mass pursuant to Public Law 86-373 is based on a variety of reasons. The first motivating consideration is the conviction that if the states do not move to assume the authority, a strong possibility exists for a reassertion of the federal monopoly over these materials. Consequently, the opportunity for the states to participate actively in the regulation and development of these important tools of industrial, medical, and agricultural advancement will be relinquished.

Secondly, decentralization of the licensing and regulatory function from federal to state level could create a more favorable climate for the development and use of these materials due to the state regulatory agency's closeness to the user. This closeness should result in a better understanding of the user's problems and a rendering of better and swifter service in issuing licenses and granting amendments. The overall effect, therefore, should be a stimulation of the development and utilization of these materials by science and industry.

This same closeness to the user may be expected to render better health and safety protection to the citizens of the state from hazards associated with radiation. The assumption of this responsibility will give back to the state control over hazards to health within its environment which have traditionally been subject to state police powers.

Another factor is the belief that the atomic energy industry will continue to grow at a rapid rate and that the licensing power can be utilized as an attraction to nuclear and nuclear-related industries to locate within the state. Industry, undoubtedly, will prefer the time and cost-saving advantages of dealing with a decentralized agency in obtaining and amending licenses for the possession and use of these materials.

Lastly, it is believed that since this program will ultimately become the responsibility of all the states, an early agreement prior to the anticipated rapid increase in radiation utilization would benefit a state tremendously. It would afford the opportunity to grow with the industry. Accepting the responsibility of 200 sources of radioactive materials in 44 facilities would be proportionately less difficult than controlling 400 sources in 88 facilities. At the time of transfer of authority from

the AEC there were 49 radioactive material licenses in the state. Since the transfer, the state has issued an additional 51 licenses for the same materials previously licensed by the commission. With the advent of radium control, the total number of specific licenses for radioactive materials has already grown to 158.

We feel that one week is all the time required to process a proper application, perform necessary inspections, and issue a license on the state level. Many of you are aware of the difficulty which has often arisen and required weeks and even months of negotiation in order to secure a license from the commission.

It may be well to point out here that there may be some delay in the issuance of medical use licenses. All such applications are reviewed by the Board's Medical Advisory Committee which meets monthly. This committee is composed of three eminently qualified radiologists and their decision determines the issuance or denial of medical applications.

In addition to the above, the unit's goal on the state level is not only to issue citations and demand compliance with regulations but to assist licensees in the performance of this task. It is felt that this relationship not only enhances the development and use of radiation on the state level, but what is more important, it insures more adequate public health and safety practices which naturally is the primary aim of the radiation control program. ★★★

2423 North State St.

A LITTLE KNOWLEDGE

The teacher was seated next to a stranger in church. It was extremely warm, and suddenly he seemed to slump forward to the floor. Remembering her Civil Defense training, she knelt instantly beside him. "Put your head between your knees," she whispered urgently. "You'll feel better if the blood can get to your head."

Putting her hand on the back of his neck, she vigorously pushed it down. "Please, lady," he moaned, "I'm only trying to pick up my hat."

Experience with Plain Gut Sutures In Cataract Surgery: Report of 268 Cases

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Hattiesburg, Mississippi

In the 22 month period from May 1, 1961, to March 1, 1963, members of the Green Clinic Staff in Hattiesburg performed a total of 268 lens extractions using plain gut sutures. In this paper they present their reasons for changing from silk and mild chromic sutures to plain gut sutures in cataract surgery. They discuss their operative procedure and the postoperative complications seen in this series.

THIS IS A REPORT of experience using plain gut sutures in cataract surgery by the Green Clinic Staff in Hattiesburg. A total of 268 lens extractions were done in the 22 month period from May 1, 1961, to March 1, 1963.

Prior to this time silk sutures and chromic gut sutures had been used. One operator (EWG) routinely used silk sutures, while the operator (EMH) routinely used mild chromic sutures in cataract surgery.

INTEREST IN PLAIN SUTURES

A number of factors were responsible for our interest in plain gut sutures. Probably the greatest factors were the disadvantages inherent in other suture material. Silk had to be removed. Removal of sutures was distasteful to both the surgeon and the patient and on some apprehensive patients proved to be as taxing for the surgeon as the operation and more uncomfortable for the patient.

The use of chromic sutures was not found to be entirely satisfactory because (1) they are wiry and difficult to control during surgery and (2) the sutures are not readily absorbed. In many patients who had cataract surgery with chromic sutures, buried gut threads could still be seen in place several months following the operative procedure. Fortunately, in the majority of these patients there was no real irritation or problem from the chromic sutures, and it was not necessary to remove them. In a fair number of cases, however, it became necessary to remove the sutures, and although removal of chromic sutures usually was not difficult, it was an undesirable procedure.

Read before the Section on Eye, Ear, Nose and Throat, 95th Annual Session, Mississippi State Medical Association, Biloxi, May 13-16, 1963.

About six years ago we began using plain gut sutures on muscle stumps in squint surgery and have experienced no major complication. Although the suture is larger and muscles heal faster than cataract incisions, it seemed the sutures were not completely absorbed in 14 days in many cases. Cataract silk sutures were removed on the 14th postoperative day, and it seemed plain sutures would maintain some tensile strength for nearly that long, especially if local steroid preparations were used.

In February 1961, at the Memphis Eye, Ear, Nose, and Throat Convention, Dr. Robert Schaffer stated that he had used plain gut sutures in a number of cataract cases and the postoperative course had been satisfactory. It was just prior to this that 6-0 plain gut became available on a micro-point corneal needle, which made it much easier to use than the 6-0 plain gut which formerly had been available.

In February 1961, we obtained several samples of 6-0 plain gut on micro-point needle and used these on a few patients. We had no compli-

cations. We liked the way the suture behaved at the time of surgery. In these particular cases the sutures did not have to be removed postoperatively, and patients and surgeons were quite happy with this material. When these samples were gone, we waited to see the effect they had on the eye postoperatively and found that the patients got along just as well as others with different types of suture.

We then obtained a larger supply and about May 1, 1961, began using them routinely on all cataract cases. Since that time we have used plain sutures on all lens extractions, including linear extractions in small children, and dislocated lens, as well as traumatic cases which are not included in this report. When suturing central corneal traumatic injuries in adults, we have continued to use 6-0 silk sutures most of the time, but in corneal wounds in children we have used 6-0 plain sutures. So far we have not experienced any difficulty.

OPERATIVE PROCEDURE

Before discussing cases and results, it might be wise to include a brief description of the operative procedure and postoperative care used by this group. Therein may lie reasons why we have been able to adapt plain sutures into our techniques. This operation is done using local anesthesia. Both surgeons dissect a fornix-based conjunctival flap and retract it to expose the incision site. One surgeon (EWG) routinely uses pre-placed sutures in a grove which is made with a scalpel prior to opening the eye. We have found that 6-0 plain sutures work quite well with this technique. As a matter of fact, the plain suture is easier to bring out through the groove with a pick because the pick does not catch fibers and cause the suture to fray and become uneven as had been observed occasionally with silk. The other operator (EMH) routinely uses tract sutures prior to the corneal section and then after the corneal section has been made, threads the other suture through the tracts. The eye is opened with a keratome, and this incision is extended with scissors.

Both operators use alpha chymotrypsin in cases where there is no contraindication. Removal of the lens is generally accomplished with capsule forceps sliding the lens out from above. However, in instances where the capsule is too tight to be grasped, an erisiphake is used. For several years three corneoscleral sutures have been routinely used. After tying the sutures, the conjunctival flap is pulled down over the incision and a watertight seal made with wing sutures nasally and temporally.

Postoperatively, it is our routine procedure to dress the eye with antibiotic and steroid ointment and atropine at least once daily until the patient is dismissed from the hospital on the fifth or sixth postoperative day. During the first few weeks at home, the use of atropine, an antibiotic, and a steroid drop is continued two to four times a day until the postoperative reaction has subsided.

REVIEW OF CASES

A total of 268 lens extractions were done during the time period involved in this report. Of these, 187 were done by using preplaced corneoscleral sutures, and 79 were done using tract sutures with placement of the plain suture following corneoscleral section. Of this group a full iridectomy was done on 166 patients, and a peripheral iridectomy was done on 102 patients. A single eye was operated on in 172 patients, and in 48 patients both cataracts were removed (not on the same day), using plain suture.

Two congenital cataracts were removed by linear extraction, and one traumatic cataract in a small child was removed by this technique. Seven cases of dislocated lens with glaucoma are included in this series. Three of these were dislocated into the anterior chamber. Interestingly, these occurred in brothers. One child had Marfan's syndrome, and each lens became dislocated in this manner within one month's time. Eighteen months later his younger brother had a lens dislocated in this same way.

COMPLICATIONS

Complications of vitreous loss and hyphemia might effect the healing of the corneoscleral incision; however, this did not appear to happen in this series. There were six patients who had vitreous loss at the time of operation, and these healed properly without any definite sign of complication. Only 12 cases of postoperative hyphemia are reported.

Postoperative complications, indicating poor wound closure or healing which might be related to the suture material used, were as follows:

I. Evidence of leaking wound:
 A. Flat anterior chamber—five cases. (All reformed after use of miotics and acetazolamide.)
 B. Updrawn pupil in round pupil extractions—three cases.
 C. Filtration bleb—two cases.
 D. Prolapsed iris—three cases. (Two of these were very minor and did not require any treatment; the third was a larger prolapse and was repaired.)

II. Evidence of poor wound healing:
 A. Significant amounts of astigmatism may indicate poor wound healing. In these cases the usual amount (if plotted on a Bell curve) was found to be 1½ diopters to 2¼ diopters. In this regard there are two cases of particular interest, one in which the cylinder was +8.00 D. and the other +6.00 D. Interestingly enough, both of these patients, when fitted with a high cylindric correction, were able to read 20/25 with the operated eye. The axis of the cylinder in most cases was within 15 degrees on either side of the 180° meridian. Only 49 cases were found where the cylinder axis varied outside of this 30 degree sector.
 B. Staphyloma in area of incision—no cases.

Prior to the repair of the iris prolapse we had used only three corneoscleral sutures. After having two filtration blebs and two mildly prolapsed irides, which we did not think required any treatment, and then this third one which did require treatment, we began using one or two and sometimes three additional sutures in closing the corneoscleral wound in instances where this seemed to be necessary. We also began injecting air into the anterior chamber at the close of the procedure in many more cases than before. In addition, we were much more careful about repositioning the iris and making sure the iris was out of the way of the suture material before the sutures were tied.

A total of 25 sutures in this series were removed. Of these, only eight were corneoscleral sutures and the other 17 were wing sutures which held the conjunctival flap down over the incision. Generally speaking, it has not been difficult to remove these sutures. Most of the time it was necessary only to pick up the knot. Since the suture material that was buried in the sclera had already disintegrated, the knot would come out very easily when moved with a pair of forceps. We have not had any case where we felt the patient was allergic to this type of suture material.

COMMENT

Speaking from the standpoint of the surgeon, I feel that 6-0 plain suture is a definite advance over either silk or chromic suture. As you can see from this report of our cases, we have not had to remove this type of suture very often, and we find that it handles easily at the time of surgery. It is not as easy to manage as 6-0 silk, but it is far easier to manage than 6-0 chromic. Its size and transparency occasionally present a problem. Early in this series the sutures were dyed at the time of surgery with methylene blue, and this made them much easier to see and, therefore, easier to manipulate. However, more recently we have been able to obtain 6-0 plain suture that is pre-dyed by the manufacturer and, although we have not found this dye to be uniform in all the sutures, we have been pleased with it most of the time. There have been one or two instances where the nurse assistant found it necessary to re-dye this suture with methylene blue in order to make it easier to see.

It is difficult to tie these sutures in the presence of vitreous; however, in all cases with vitreous loss we were able to tie the suture tightly, and there was no postoperative complication. We found the following technique effective: Tie the first knot with a double loop, and after reinforcing the incision with additional sutures, the original ones may be removed and replaced easily if they are too loose.

From the patient's standpoint, these sutures are not as comfortable as 6-0 silk. Patients do complain more of them, and apparently the knots are larger and less pliable and the ends of the sutures do irritate and scratch more than 6-0 silk. However, they are not nearly as bad as 6-0 chromic. By the time the patient leaves the hospital, unless the ends of the suture have worked out beneath the conjunctival flap, the sutures have become pliable enough to be comfortable, and the patients have had very little difficulty with them except in the few which necessitated removal.

SUMMARY

Reasons are presented for changing from silk and mild chromic sutures to plain gut sutures in cataract surgery. Favorable experience with this suture material in a series of 268 operated cases is presented, along with a discussion of operative procedure and postoperative complications. ★★★

705 Hall Ave.

Rheumatic Fever

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The diagnosis of rheumatic fever is never made lightly for it commits the patient to an indefinite and expensive period of prophylaxis and may interrupt schooling or interfere seriously with vocational activities. Of dubious etiology, the disease must be diagnosed and treated primarily by clinical acumen. There are no specific laboratory tests for definitive diagnosis, and no specific therapy is known which offers success in all cases. The author discusses the major and minor manifestations of rheumatic fever and considers treatment.

RHEUMATIC FEVER has remained especially interesting to clinicians since the first suggestion of its association with streptococcal infections in 1886. The diagnosis and management of this disease are still dependent on clinical acumen. There are no specific laboratory tests for definitive diagnosis and no specific therapy which offers success in all cases.

As with many diseases with a dubious etiology, rheumatic fever is a popular subject in the current literature, and there are thousands of papers suggesting various drugs and regimens for its management. Most authors admit that a specific agent has not been found. It is generally agreed that the clinical picture has changed over the last few decades, particularly since penicillin has been used so widely. During the past few years the original Jones criteria, used as a guide in the diagnosis of acute rheumatic fever, has been repeatedly modified and close appraisal of its use suggests that an even clearer definition is needed. The diagnosis of acute rheumatic fever is sometimes based on minimal and questionable evidence, subjecting a child to many years of prophylaxis at a cost approaching $1,000 for drugs alone. Certainly, it seems worse to label a well child a "rheumatic" than to miss an early case who has the disease.

Patients who present with more than two of the major manifestations of rheumatic fever are infrequent; in fact, the most difficult problem is the patient who demonstrates only one major manifestation and perhaps two or three equivocal minor ones. In such a case it is important that the clinical findings be typical and that positive laboratory tests substantiate the diagnosis. Arthritis, for example, should involve more than one joint and should be migratory in timing, and the joints should be characteristically swollen and painful. Local heat and the type of joint involved are not always helpful findings. Although rheumatic fever may present as a monarticular arthritis, other joint involvement or other signs of activity will usually appear if the patient is untreated and observed for one or two weeks.

Evidence for carditis as a major sign of rheumatic activity is frequently misinterpreted. Probably this is due to the fact that many functional murmurs, common during childhood and accentuated by febrile illnesses, are thought to be organic. An organic murmur that has recently appeared or that disappears while the patient is under observation is an early sign of carditis. This does not include functional murmurs that have changed in intensity during the period of observation. Remembering that in acute rheumatic carditis the mitral and aortic valves are most frequently attacked, one would expect regurgitant murmurs of mitral or aortic insufficiency. The

From the Department of Pediatrics, Emory University School of Medicine.

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murmur of mitral insufficiency should be heard maximally at the apex and should transmit to the left axilla and lower left sternal border. It is typically pansystolic, high pitched, and accompanied by a soft first heart sound. There is usually a third heart sound or low pitched, diastolic murmur (Carey Coombs) heard in mid-diastole. The murmur of aortic insufficiency is usually heard well along the mid-sternal border and is very high-pitched, beginning with the second sound, extending into diastole, and then having a decrescendo quality.

The appearance of a friction rub in a patient with rheumatic pericarditis is almost invariably accompanied by murmurs of valvular involvement. If evidence of valve disease does not appear, then rheumatoid arthritis, lupus erythematosis, viral pericarditis, and other causes of pericarditis must be strongly considered. The x-ray diagnosis of pericarditis is frequently uncertain since a large cardiac shadow may appear rather rapidly from myocarditis and congestive failure. The electrocardiogram is of little help during the early phase of pericarditis as it is frequently normal. Increasing cardiac size by physical examination and by chest x-rays is accepted as evidence of carditis; however, cardiomegaly by x-ray interpretation alone should be based on good inspiratory films. Congestive heart failure in childhood usually indicates *active* rheumatic carditis since mechanical heart failure due to previous valvular damage does not usually appear until adolescence or adulthood.

Subcutaneous nodules almost always accompany other major manifestations of acute rheumatic fever and notoriously keep company with severe carditis. Erythema marginatum is relatively uncommon and, similar to chorea, may occur toward the end of the rheumatic attack. Chorea that is self-limited may or may not be accompanied by other signs of rheumatic fever. Since it can appear late in the course of an attack, acute phase reactants may have returned to normal. Therefore, chorea, even with negative laboratory tests, is still accepted as important evidence of acute rheumatic fever.

MINOR CRITERIA

The minor criteria for the diagnosis of acute rheumatic fever need little comment. Arthralgia becomes important only when we remember that it occurs more commonly with severe carditis than does overt arthritis. The C-reactive protein determination is a nonspecific reaction to acute inflammation, and it is not a specific test for acute rheumatic fever. Serum protein electrophoresis has shown that one of the globulin is usually elevated during the early phase of acute rheumatic fever; this fraction, designated as alpha 2, is also elevated in many other inflammatory diseases, including rheumatoid arthritis. During the convalescent stage a nonspecific increase in gamma globulin is commonly found.

PRECEDING INFECTION

Some proof of a preceding streptococcal infection, if looked for vigorously, has become almost mandatory. Only one-third of the children with acute rheumatic fever have a history of a previous infection. As shown by Stollerman in 1956, elevation of the antistreptolysin O antibody will be found whenever adequately sought. If a patient has had rheumatic fever for several weeks or months, then an ASO titre in the normal range may be expected; it is not unusual in chronic rheumatic carditis or in the patient with chorea. For this laboratory test the solution of antigen must be kept in a refrigerator; if allowed to stay at room temperature for 30 minutes or longer, then all subsequent tests may be negative. Throat cultures are positive for beta hemolytic streptococcus in about 60 per cent of patients, but this varies with technique of obtaining cultures and laboratory methods. Prolongation of the P-R interval on the electrocardiogram is one of the minor criteria for diagnosis of acute rheumatic fever but is not evidence of carditis.

The estimated sedimentation rate remains one of the most valuable laboratory aids in diagnosis and management of rheumatic fever. It is a simple test to perform, and, therefore, it is difficult for even the untrained to obtain erroneous results. Of course, there are many conditions that may produce an elevated sedimentation rate, but once the diagnosis of rheumatic fever is established, the sedimentation rate is of great value in judging the course of the disease process and the response to therapy.

There are certain clues that help in the prognosis and management of patients. The old maxim, "Rheumatic fever licks at the joints but bites at the heart," may perhaps be reversed in the light of recent data to read, "When rheumatic fever bites at the joints, it generally licks or spares the heart." It is well recognized that children less than five years of age who develop rheumatic fever are more apt to have carditis and less apt to have typical rheumatic joints than the older child or

adolescent. Also, the adolescent who presents with overt arthritis in the first attack of rheumatic fever has less than the average risk of carditis developing. Carditis occurring in the young child is more likely to be severe, and the mitral valve is almost always involved. Aortic valve disease is more common in males in late childhood or adolescence.

Although the mortality rate of acute rheumatic fever seems low (1.6 per cent), it is still too high. Pediatricians frequently forget the number of deaths occurring in young and middle age adults from rheumatic valvular damage. The duration of an acute attack varies tremendously, but over 80 per cent of patients will show no sign of activity, clinically or by laboratory methods, after six weeks. Patients who have continued signs of activity beyond six months should be considered to have chronic rheumatic fever.

MANAGEMENT

In the management of acute rheumatic fever there are still wide differences of opinion among physicians. There is general agreement, however, that penicillin is the most important drug in use today. Ten days of therapy for the eradication of beta hemolytic streptococcus, group A, even when the original throat culture is negative, has been shown to make a considerable difference in the course of the disease. Although ten days of adequate doses of penicillin-G is usually sufficient to eliminate the organism, reculture is necessary. An occasional patient with both hemolytic streptococci and coagulase-positive staphylococci in the throat will continue to harbor streptococci in spite of "adequate" penicillin. In such cases, it is necessary to eliminate the penicillinase-producing staphylococci, which may require other agents, such as oxacillin or erythromycin.

The use of long-term bed rest in acute rheumatic fever has been questioned in recent years. It is well known that 80 per cent of the patients who develop carditis show evidence of cardiac involvement during the first two weeks of the illness. Because of this, a few medical centers are permitting limited activity after the third week of rheumatic fever if no evidence of carditis has presented. However, the effects of early ambulation during active rheumatic fever are still unknown and more information is needed before a change in policy can be accepted.

Salicylate and steroid therapy each have a place in the management of rheumatic fever. Aspirin, both inexpensive and safe if used in proper doses, is still the drug of choice in acute rheumatic fever without carditis. There is no evidence to suggest that steroids when used in the early phase of rheumatic fever will prevent or arrest carditis. If steroids are used for the treatment of mild rheumatic carditis, then they are chosen because of a personal prejudice. There is no proof that the residual cardiac damage differs in patients treated with steroids and patients treated with aspirin. However, in the rheumatic with severe carditis, steroids are widely used and are, without question, lifesaving. Steroids are certainly justified in carditis that is progressing in spite of aspirin therapy when a drug is needed that will suppress the exudative inflammatory reaction as quickly as possible. The pericardial effusion of rheumatic pericarditis responds more rapidly to steroids than to aspirin. Yet, in spite of large doses of steroids, patients are still lost with acute rheumatic carditis, and it is obvious that present therapy is not the real answer. Proper therapy will depend upon a better understanding of etiology. The complications or serious reactions to steroid therapy are frequently forgotten but may well contribute to the mortality statistics of rheumaic carditis. The complications include: hidden infections—bacterial and viral; hypoadrenocorticism with sudden shock in the withdrawal period; fluid and electrolyte imbalance—pulmonary edema or hypokalemia; central nervous system problems—convulsions, psychoses, hypertensive encephalopathy; gastrointestinal disturbances—bleeding and perforation; osteoporosis and fractures; insulin resistant diabetes mellitus.

Sydenham's chorea is usually easily handled by sedatives. Tranquilizers and antihistamines with sedative side effects have been used but have serious and confusing side effects.

Prophylaxis against streptococcal infections has reduced the rate of recurrent rheumatic fever from 70 per cent to less than 10 per cent. Since no "cure" for rheumatic fever has been found, continuous prophylaxis remains one of the most vital forms of management. Rheumatic fever remains a "bad" disease, and the best method of management is prevention. ★★★

Emory University Hospital

Clinicopathological Conference XLVII

Conducted by the Department of Pathology
Mississippi Baptist Hospital
Jackson, Mississippi

In CPC XLVII, Dr. Thomas K. Williams, Jr., discusses the case of a 23-year-old white female admitted to the Baptist Hospital two weeks postpartum with the chief complaint of severe abdominal pain. Her delivery had been apparently uncomplicatd except for some urinary retention and difficulty in voiding. Approximately a week following delivery, however, the patient began having abdominal discomfort, a greater-than-normal amount of vaginal bleeding, nausea and vomiting. She was rehospitalized and treated with intubation with a Levin tube, intravenous fluids, and blood transfusions and was referred to the Baptist Hospital.

Other discussers are Drs. James M. Packer, Louis Schiesari, O. B. Wooley, H. K. Stauss, and Clinton E. Wallace.

THIS WAS THE FIRST Mississippi Baptist Hospital admission of this 23-year-old white, married female, gravida IV, para III, abortus I, now two weeks postpartum from an apparently uncomplicated delivery of a viable, seven pound infant. She entered with the chief complaint of severe abdominal pain.

She was hospitalized for only two days at the time of delivery, and she stated the only difficulty which she had following delivery and before leaving the hospital was some urinary retention and difficulty in voiding. Approximately one week following delivery this patient had more than the average amount of vaginal bleeding. She had acute epigastric and abdominal pain which required rehospitalization. It was felt at this time that the patient probably had urinary tract infection, and she was treated medically. She subsequently developed some nausea and vomiting but was discharged from the hospital improved after two or three days treatment.

Shortly thereafter this patient had a recurrent bout of abdominal discomfort, nausea, vomiting of mild degree and took approximately 40 Darvon Compound-65 capsules within 24 hours. This required rehospitalization, intubation with a Levin tube, treatment with intravenous fluids, and blood transfusions of 1000 cc. She was referred to Jackson two days later.

This patient's past history was significant in that she had been known to have difficulty with narcotics in the past as well as with alcohol. It was said that she consumed a fifth of vodka every two days during the six months prior to this admission. There was also one episode of upper GI bleeding which was rather acute and massive following intubation and prior to transportation of this patient to Jackson. The patient was allergic to penicillin and sulfa, and her grandfather was a diabetic.

Physical examination on admission showed blood pressure 108/70, pulse 110-120, respirations 22. Temperature was 101.6 degrees and weight 110 pounds. This was a thin, acute and chronically ill white female who had a Levin tube and Foley catheter in place when admitted. She was also receiving intravenous fluids at the time of admission. General physical examination showed several positive findings. The abdomen was slightly distended in the lower part, and bowel sounds were hyperactive. There was little or no tenderness in the upper quadrants of the abdomen. There was rather marked tenderness and fullness in both lower quadrants of the abdomen below the umbilicus and a definite impression of a mass completely filling the lower abdomen, which was quite tender to palpation.

Pelvic examination revealed a marital introitus with no gross lesion of the external genitalia. There was moderate bloody discharge without significant odor from the external os. There was

no visible or probable lacerations of the cervix, vagina, or external genitalia. There was marked tenderness bilaterally on bimanual examination in the area of both adnexa. The uterus could not be separated or distinguished from the other lower abdominal mass previously described on abdominal exam. There was definite fullness and toneing in the cul-de-sac of Douglas. Rectovaginal examination confirmed the pelvic examination, and the impression was large pelvic abscess, acute peritonitis, probable urinary tract infection, and possible septic shock.

LABORATORY DATA

On admission, the hemoglobin was 10.5 gm., hematocrit 34 vol. per cent, CO_2 combining power 27.3 mEq/L, chlorides 88 mEq/L, urea nitrogen 57 mg., potassium 4.2 mEq/L, sodium 130 mEq/L, serum amylase 32 units, bleeding time 2 minutes, 5 seconds, clotting time 13 minutes, 15 seconds. The white count was 26,850; the differential count was 2 monocytes, 5 lymphocytes, 77 segmented neutrophiles, 15 bands, 1 atypical lymphocyte. An anti-kell antibody was demonstrated on cross matching blood, with positive hemantigen noted.

Admission urinalysis showed albumin trace, sugar negative, acetone negative, occasional WBC, 2-4 RBC, occasional squamous epithelial cells, 2+ bacteria. The fibrinogen test was normal. No lysis was observed at the end of 60 seconds. A gram stain of the cervical smear showed no gram negative intracellular diplococci and no gram positive bacilli. Urine culture showed no growth after five days. Cultures of pelvis showed *Escherichia coli* and *Staphylococcus Aureus,* coagulase negative. Blood cultures were obtained. Sensitivity tests showed organisms to be highly sensitive to Chloromycetin, Furacin, Furadantin, Mandelamine, and Coly-Mycin.

A KUB film obtained on admission showed an apparent ileus with no true mechanical obstruction suggested. There was a suggestion of a mass in the pelvic area. A portable chest film five days following admission showed healing rib fractures and changes to the left base suggesting pleural thickening secondary to injury. An EKG showed sinus tachycardia and abnormal T-wave changes. No right ventricular enlargement was noted.

HOSPITAL COURSE

On the day following admission the patient's supportive therapy of intravenous fluids, intravenous antibiotics, whole blood, gastric suction was continued. On the night following admission she was taken to surgery and incision and drainage of a large pelvic abscess was done vaginally. Approximately 800 cc. of sanguinous, purulent fluid was removed under pressure. A large mushroom catheter was inserted in the cul-de-sac of Douglas for continued drainage. A D & C was considered at this time, but because of the patient's septic condition, it was felt inadvisable. The uterus was gently sounded, however, to a depth of 4½ inches. Following incision and drainage of this abscess, the previously described mass in the lower abdomen and pelvis was much less prominent, but even under anesthesia it was quite difficult to evaluate whether all areas had been adequately drained.

The patient withstood this procedure well; she had a transient drop in blood pressure immediately following this procedure which responded to 500 cc. of blood. The first postoperative day this patient appeared clinically improved and symptomatically felt much better, but she spiked fever to 103 degrees. Continued supportive measures were given including transfusion and antibiotics. On the evening of the first postoperative day and in the early morning hours of the second postoperative day, the patient had a gradual fall in her blood pressure to 60 to 70 systolic although until morning of the second postoperative day she appeared clinically improved. At this time the antibiotic Chloromycetin Succinate was increased to a dose of 3 gm. daily, intravenously. The patient was given Solu-Cortef, intravenously, Premarin, intravenously, and nasal oxygen was added. She was felt to be in critical condition at this time.

On the evening of the second postoperative day she spiked fever to 105.4 and on the third postoperative day seemed remarkably improved—her fever dropped to 99. Consultation with an internist was obtained on the second postoperative day. Also on the second postoperative day there had been evidence of upper gastrointestinal bleeding, bright blood being noted through the Levin tube. The patient was treated with multiple transfusions. On the fourth postoperative day no active bleeding was noted. Hematocrit was 21 vol. per cent.

The patient was seen in consultation throughout her hospital course by general surgeons, gynecologists, and internists. At one time the advisability of surgery of the bleeding site was discussed but was felt to be inadvisable because of the patient's moribund condition. On the second postoperative day her urinary output decreased appreciably to only 10 cc. per hour, but following the spike of fever on the third postoperative and

fourth postoperative days the urinary output increased tremendously. The patient had good bowel sounds and actually had several bowel movements. She remained relatively afebrile throughout the remaining days in the hospital. Several attempts were made to clamp Levin tubes, but they were unsuccessful. On the morning of her seventh postoperative day this patient rather suddenly expired. An autopsy was obtained.

DISCUSSION

Dr. Thomas K. Williams, Jr.: "This is a rather long protocol, and I'm going to play the thing fairly straight so I'll briefly give you the highlights of it and then go to the discussion. This was the first hospital admission to the Baptist Hospital of this 23-year-old white female who was two weeks postpartum at the time of her admission. Chief complaint on admission was severe abdominal pain. Her present illness apparently started with a normal delivery. About a week after her discharge from the hospital she began to have a more than average amount of vaginal bleeding associated with acute epigastric and abdominal pain and was rehospitalized. It was felt she had a urinary tract infection, and she was treated medically. She had some nausea and vomiting on that hospitalization but improved after two or three days and was discharged.

"Apparently a short time thereafter she had a recurrent bout of abdominal discomfort, nausea and vomiting, and took approximately 40 Darvon Compound-65 capsules within 24 hours. She was then rehospitalized, intubated with a Levin tube and treated with intravenous fluids and blood transfusions. She apparently had an episode of upper GI bleeding, which was rather acute and massive, following that intubation and before she was sent over here. In her past history it should be noted that she had been having some trouble with narcotics as well as alcohol and had been drinking about a fifth of vodka every two days for the last six months.

"Physical examination when she was admitted showed a thin, chronically and acutely ill white female with Levin tube and Foley catheter in place. She was receiving intravenous infusions at that time. Temperature was 101.6. The abdomen was slightly distended in the lower part, bowel sounds were hyperactive, and there was little or no tenderness in the upper quadrants. However, she was rather markedly tender with fullness in both lower quadrants of the abdomen below the umbilicus, and it was felt that a mass could be felt in the lower part of the abdomen which was very tender to palpation.

"Pelvic examination, other than for a bloody discharge without significant odor, did not show anything grossly to inspection, but she was markedly tender on bimanual examination in the area of both adnexa. The uterus could not be separated from or distinguished from this mass in the lower abdomen. There was some fullness in the cul-de-sac and rectovaginal examination confirmed the pelvic findings. The impression on admission was a pelvic abscess, acute peritonitis, probable urinary tract infection, and possible septic shock.

"Her laboratory data on admission showed hematocrit 34 vol. per cent; chlorides were low, 88 mEq/L, urea nitrogen was 57 mg. The remaining electrolytes, potassium, sodium, and CO_2, were within normal limits. The amylase was normal. Bleeding time was normal. Clotting time was a little bit long but essentially normal. The white count was 26,850 with a shift to the left as we would suspect. On typing and cross matching they found an anti-kell antibody and a positive hemantigen. Urinalysis showed a trace of albumin, occasional white blood cells and red blood cells, and 2+ bacteria.

"The fibrinogen test was normal, and gram stains of a cervical smear did not show any intracellular gram negative diplococci or gram positive bacilli. Urine culture after five days showed no growth, and cultures of the material which was taken from the pelvis when the abscess was incised and drained showed *E. coli* and *Staph. aureus,* coagulase negative. Blood cultures were obtained, but their results were not reported. Sensitivity tests showed organisms to be highly sensitive to Chloromycetin and other drugs, and she was started on Chloromycetin.

"A KUB film showed an ileus without any true mechanical obstruction being apparent and a suggestion of a mass in the pelvic area. A portable chest film five days following admission showed healing rib fracture and changes in the left base suggesting pleural thickening secondary to injury. An electrocardiagram showed sinus tachycardia and abnormal T-wave changes.

"On the day following admission she was receiving antibiotics, blood, intravenous fluids, and gastric suction. She had been taken to surgery the night of admission and I & D of the pelvic abscess had been done, draining 800 cc. of material through the cul-de-sac and inserting a Foley catheter for continued drainage. A D & C was not done because of her septic condition, but the uterus was sounded to a depth of 4½ inches. There

was some question as to whether all areas had been adequately drained, but at the same time the mass was much less prominent.

POSTOPERATIVE COURSE

"She withstood the operative procedure well except for a transient drop in her blood pressure which responded to 500 cc. of blood. The day following this she appeared to be clinically improved but had fever to 103. Continuous supportive measures were given including transfusions and antibiotics. In the early morning hours of the second postoperative day her blood pressure fell to 60 or 70 systolic although she otherwise appeared clinically improved. At this time antibiotics were increased as far as dosage was concerned, and she was also put on Solu-Cortef and Premarin and was given oxygen. It was felt that now she was critical, and on the evening of that day she spiked a temperature up to 105.4. However, on the third day she seemed to be remarkably improved and her fever dropped to 99.

"The protocol notes that one probable cause of her shock was that on the second postoperative day she again had evidence of upper gastrointestinal bleeding through the Levin tube. She was treated with multiple transfusions in addition to her Solu-Cortef and Premarin. It doesn't say how long she bled except that on the fourth day she no longer had any active bleeding noted, and hematocrit at that time was 21 vol. per cent even though it was reported that she had multiple transfusions. I imagine she must have bled fairly massively.

"On the second postoperative day when she was in such a critical condition, her urinary output decreased. After the third day it began to respond, and she apparently was putting out normal amounts of urine. She had good bowel sounds and actually had several bowel movements; however, it is of interest that several attempts made to clamp the Levin tube were unsuccessful. No note is made of whether the tube was ever removed or not. On the morning of her seventh postoperative day she rather suddenly expired. I gather from the protocol that from the fourth to the seventh day she apparently was doing very well and was afebrile and out of shock.

"We have a patient who was seen by a gynecologist primarily on initial admission, I am sure, but internists and general surgeons were also called in to consult with her. I am going to play the thing straight as far as her reason for admission and course from that standpoint is concerned and assume that she had a pelvic abscess, acute peritonitis, and possibly septicemia as the result of a postpartum infection. This was drained, and it's my impression from the protocol that from the standpoint of her septic shock and general septic condition she improved. Apparently, the sepsis was brought under control, although cortisone and multiple transfusions and high doses of antibiotics were needed. I gather that by the time she expired she had responded well to the treatment for her *E. coli* and staph infections.

POSTOPERATIVE BLEEDING

"This leaves us then with the bleeding as being of primary concern because it seemed to complicate the picture off and on through here. I'd like to discuss this in several different categories. Postoperative bleeding or bleeding following trauma, not necessarily related to a burn or a brain tumor or brain surgery, is said to occur in about 3 per cent of patients. It is due almost always to some manifestation of peptic ulcer disease, whether it be an acute duodenal ulcer or an acute gastric ulcer or multiple gastric ulcers or esophagitis.

"Stress seems to play an important role in these conditions. Fat embolism from rib fractures or orthopedic problems has been implicated; it is felt that emboli to small veins going to the stomach and duodenum do something to the blood supply and that this is the initial factor that allows acid digestion or the formation of ulcers. Sepsis and shock have long been known to be associated with acute or sudden hemorrhage, and now that we know more about adrenal function and the adrenal hormones, we feel this is the result of stress and adrenal malfunction. Any of these factors could have played a part in this patient's condition. I don't know why she had the rib fractures, but they are mentioned, and so a fat embolism could have played a part. Second, she certainly had more than enough just on the basis of her sepsis and infection to produce a stress ulcer.

"When I say stress ulcer, I don't necessarily mean duodenal; it can be gastric as well. These may be multiple. At times during surgery you cannot find a bleeding point and even at postmortem you can't find the bleeding point. It is felt that these patients bleed from multiple places in the

mucosa which then heal over so that we can't demonstrate them on postmortem. In addition, this patient had taken a large amount of Darvon Compound-65 capsules which, as you know, contain an appreciable amount of aspirin. Aspirin has several times been implicated as a cause of gastritis and bleeding from the stomach.

"Let's see, we've got stress and we've got the aspirin. Another thing that possibly could have come into this is the fact that she had been intubated and that the bleeding did not come on until after intubation. Levin tubes have long been said to cause a number of complications. One of the conditions that they are suspected of causing is bleeding primarily from the esophagus-gastric junction on the basis of ulceration or necrosis from pressure in this area.

"It must also be mentioned that the patient had a history of alcoholism. Still, she was comparatively young, and although no liver function tests or prothrombin times are noted, I doubt if she had been drinking long enough for cirrhosis development. It is my impression that it takes several years for cirrhosis to develop. All of these things point to a peptic ulceration of some sort as the cause of her upper gastrointestinal bleeding. While melena is not mentioned, I am sure that she was having some, but apparently a large part of her bleeding was coming back through the tube or emesis.

POSSIBLE SYNDROMES

"Peptic ulceration of some form or other is by far the most likely cause of post-traumatic bleeding being implicated in about 60 or 70 per cent of cases. Hiatal hernias or peptic esophagitis probably account for another 7 or 8 per cent. Neoplasms of some sort, either a polyp or less likely carcinoma or some other growth, probably account for 4 or 5 per cent of cases of post-traumatic bleeding. Several other conditions are less likely to cause GI hemorrhage. These include blood dyscrasias, which I don't see any reason for suspecting at this time, Hodgkin's disease, and ruptured aneurysm. Some people who have been under stress over a period of time and have a hypovitaminosis or an avitaminosis are more likely to bleed. Foreign bodies and a number of other factors may come into it.

"One syndrome that I would like to mention, primarily because I think it could have happened in this patient or at least could have contributed to her other causes of bleeding is a Mallory-Weiss syndrome. This is a rupture of the esophageal and cardial wall with bleeding from this area. This is not a true perforation; it is my understanding it is just a rupture of the mucosa from vomiting or straining with bleeding from this source. Before I come to the final conclusions could we see the films and see if we can get any more ideas out of them."

X-RAY DATA

Dr. James M. Packer: "Abdominal films dated Aug. 26, 1963, show gas distributed through both the large and small bowel with the appearance suggesting an adynamic ileus rather than mechanical obstruction. There is displacement of gas-filled loops out of the pelvis suggesting either a mass or fluid accumulated in this region. Poor definition of organ shadows is seen, and there appears to be some separation of bowel loops.

"A chest film showed an increase in density in the left base suggesting fluid in the left pleural space. On the right side the lung was essentially clear, but the diaphragm was elevated. This possibly was associated with abdominal distention.

"Old healed rib fractures were seen on the left, the 6th, 7th, 8th, and 9th ribs being involved near the midaxillary line."

DISCUSSER'S DIAGNOSIS

Dr. Williams: "To sum up, we have a patient that had a rather septic post-partum course from which I think she had recovered fairly well. Complicating this sepsis was upper gastrointestinal bleeding which apparently was brought under control and from the third or fourth postoperative day she apparently did well until suddenly on the seventh day she expired. Admittedly, I am guessing. She could have expired from a pulmonary embolus or coronary or any number of things. Since this is a CPC and I have to stick my neck out, I'll say that she suddenly started to bleed again and expired from massive bleeding and the most likely cause of her bleeding was a stress ulcer or hemorrhage from the gastric mucosa or duodenum brought on as the result of her sepsis and infection and aggravated by the aspirin and the history of alcoholism."

Dr. Louis Schiesari: "Dr. Wooley, do you have any comments?"

Dr. O. B. Wooley: "First of all, I think the patient was seen initially by a general surgeon, and the gynecologist was the last to see her. The thing I did not understand about this patient was her

sudden demise. I also couldn't understand why she seemed to be improving right along and then all of a sudden expired. This patient was quite ill when she came here, with some factors about her history that were not clear."

Dr. H. K. Stauss: "Although we have no suggestive evidence in the protocol, I think that in a patient who has had bleeding from the intestinal tract, nausea, and vomiting, we would have at least to mention aspiration as the cause of sudden death. We think conditions involving the bronchial tree are probably the most common cause of death in institutions with people who have alcholic and narcotic problems and perhaps in others too. From what I hear, I doubt that intrathoracic trauma or remote rib fractures had any bearing on the present case. If she did have a rupture of the esophageal-gastric mucosa, she could have bled suddenly and massively once again from that to the point of demise."

Dr. Clinton E. Wallace: "I don't really have anything of importance to add, but I think a prothrombin time would have helped and also a repeat BUN at a later date. There is the possibility of a type of nephropathy that may have occurred and caused electrolyte abnormality which would have caused this sudden death. I agree, though, with what Dr. Williams has said.

"Another thing that has always worried me, especially with patients on steroids, is how much you are covering up. It is difficult to be sure an infection is actually controlled just because the patient begins to look rosy and the temperature comes down. We've all had this problem, I'm sure. Of course, the protocol doesn't say whether the patient was maintained throughout this time on steroid medication or was given it during the period of shock."

AUTOPSY REPORT

Dr. Schiesari: "In the uterine cavity there was a mass about 5 cm. in diameter of necrotic placental tissue. The uterus was coated by a thick layer of organizing exudate, and the loops of small intestine were matted together circumscribing numerous pockets of dense, greenish-yellow pus. The intestine was friable, and upon unraveling the intestinal loops, the wall was found to be torn in several places. The stomach was adherent to the transverse colon. A large, ill-defined, shallow, ulcerated area was present on the mucosa of the greater curvature in the central part of which a perforation communicated freely with the lumen of the adherent colon. There was in addition a diffuse bronchopneumonia. No cirrhosis of the liver was found."

STOMACH LESION

Dr. Wooley: "Dr. Schiesari, do you think this ulceration of the stomach and perforation occurred after her pelvic abscess or was the cause of the pelvic abscess?"

Dr. Schiesari: "I think it occurred after her pelvic abscess."

Dr. Wooley: "What makes you think so?"

Dr. Schiesari: "This vast lesion of the stomach was not the common type of ulcer that we see in the stomach. The gross and microscopic features are those of a very recent acute process, more in keeping with a necrotizing or phlegmonous type of gastritis."

Dr. Wooley: "How do you explain her sudden death?"

Dr. Schiesari: "I don't know exactly how to explain it because there was no massive bleeding in the G.I. tract with the exception of a very small amount of blood in the stomach. But I think that intoxication due to massive peritonitis and bronchopneumonia is a satisfactory explanation."

Dr. Wooley: "It's not unusual for a patient to have bleeding postpartum, sometimes in sufficient amount to require rehospitalization and a dilatation and curettage. I'm sure there are a number of patients that have a little more than the usual amount of bleeding yet never quite come to the point of being readmitted and that have some retained parts of placenta that autolyze and pass. Assuming that the uterus is the primary site of infection, I don't know that I've ever seen a pelvic abscess of this type in a patient two weeks postpartum. I think the point has to be brought up as to which came first, and whether we were actually draining the abdominal cavity rather than what we normally think of as a walled-off pelvic abscess. This fluid at the time of drainage was quite sanguineous. It was purulent also, but it was not the thick, tenacious type fluid that we see in the usual pelvic abscess. This is one point I'd like for you to comment on."

Dr. Schiesari: "I think it is correct to assume that the time interval between the drainage and the autopsy was sufficient for the leukocytic exudation to increase to such an extent as to change the appearance of the exudate from a purulent-sanguineous type to a frankly purulent one."

Dr. Wooley: "So you assume that this was a so-called ascending type of infection from the uterus through a tube into the pelvis."

Dr. Schiesari: "Yes."

Dr. Williams: "I think that the physical findings when she was admitted would have been more generalized in the abdomen rather than just in the lower abdomen, and there would have been a different picture if she had had a perforation. In addition, although not necessarily, one should have seen some air beneath the diaphragm." ★★★

1190 North State St.

WHERE NEVER IS HEARD . . .

A herd of buffalos was stampeding across the plains. Suddenly the lead buffalo hesitated and was quickly overtaken. He was knocked down and trampled on by the rest of the herd. The last buffalo was kindhearted and stopped to console his fallen friend. He solicitously asked, "But why did you stop so suddenly?"

"Well," replied the lead buffalo, "I thought I heard a discouraging word."

Radiologic Seminar XX: Dermoid Cyst of the Ovary

ROBERT D. SLOAN, M.D.
Jackson, Mississippi

DERMOID CYSTS (cystic teratomas) comprise approximately 10 per cent of all ovarian tumors. These lesions, thought to represent a species of imperfect parthenogenesis, usually contain derivatives of all three germ layers although ectodermal elements predominate. They usually make themselves clinically apparent during the childbearing years and are present in both ovaries in 10 to 20 per cent of the cases.

The typical dermoid cyst is 5 to 15 cm. in diameter, somewhat oval in shape, with a well-defined fibrous capsule. Its contents are its most characteristic feature. The yellowish, oily fluid containing varying amounts of hair cannot be confused with the contents of any other ovarian cyst. After removal, when the temperature of the cyst drops below body level, the sebaceous contents assume a semisolid, greasy consistency. There is usually a so-called plug or focus at one point along the wall containing abortive tissue elements including teeth or bone.

The most common complication is torsion, and in one large series[1] this was noted in 13 per cent of the cases. Infection occurs in 2 per cent of the lesions, with rupture and malignancy each having a 1 per cent incidence. Rupture may take place into either the peritoneal cavity or a hollow viscus such as the urinary bladder or colon. Malignancy is usually of the squamous cell variety, and when it has extended through the fibrous capsule of the dermoid, it carries a very poor prognosis.

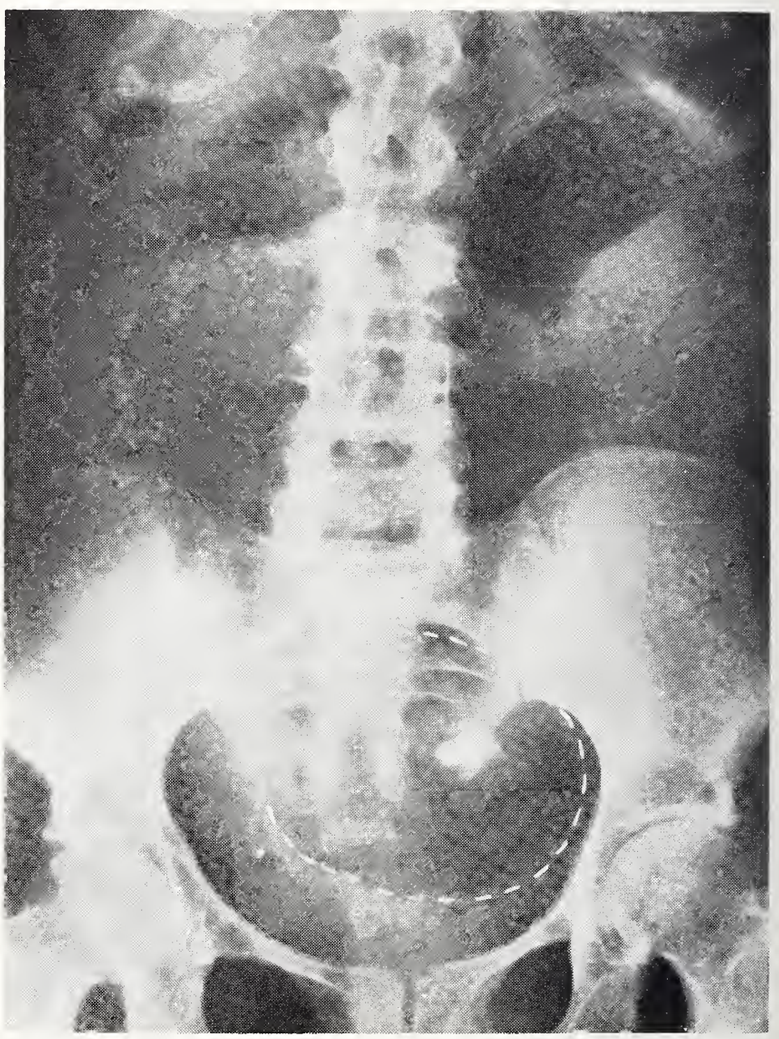


Figure 1. Radiograph demonstrating a classical dermoid cyst of the left ovary. Note the relative radiolucency and the well-developed teeth. The capsule has been outlined for illustrative purposes. At surgery the lesion measured 11 × 15 cm. and contained large amounts of sebaceous material and hair, plus two well-formed teeth.

Sponsored by the Mississippi Radiological Society.

From the Department of Radiology, University of Mississippi School of Medicine.

Ovarian dermoids are of radiologic interest because of our ability, at times, to make a specific diagnosis of their presence on routine abdominal radiographs. The classical radiographic features consist of a round or oval radiolucency in the soft tissues of the pelvis or lower abdomen, bounded by a sharply defined capsule and containing abortive teeth or bony structures (Figures 1 and 2A and 2B). The relative radiolucency of these cysts, when compared against the background of the surrounding host soft tissues, is related to their high sebaceous content.

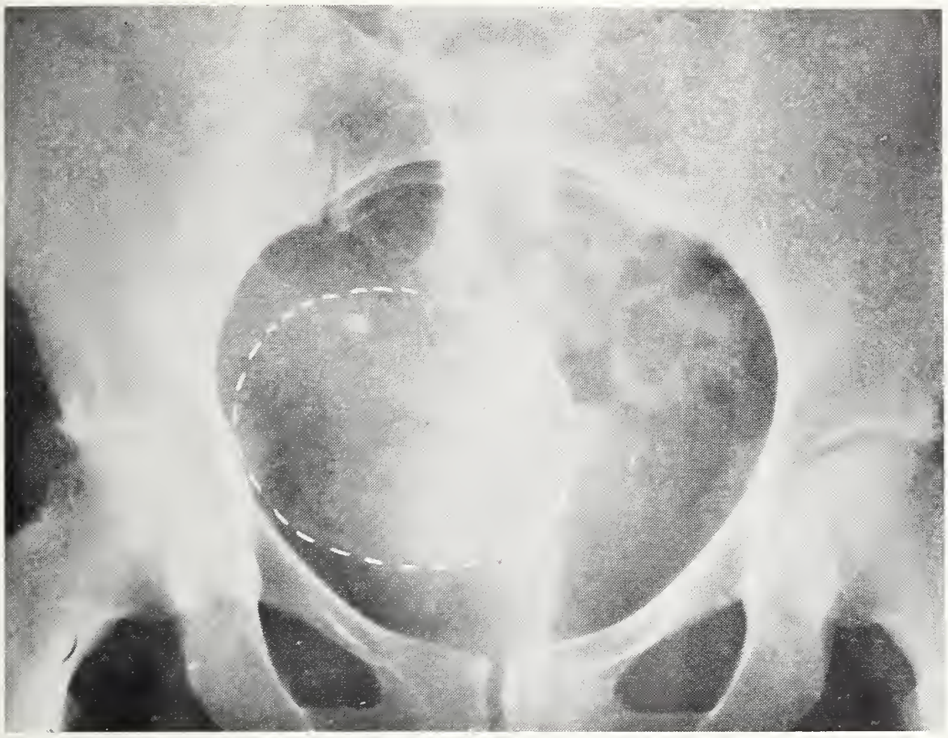


Figure 2A. Pelvic radiograph showing surgically confirmed dermoid of the right ovary measuring 9 cm. in greatest diameter. The pattern is diagnostic but not as obvious as compared with Figure 1. Again the capsule has been outlined for purposes of illustration, although it was readily apparent on the original radiograph. Note the small abortive tooth along the upper border.

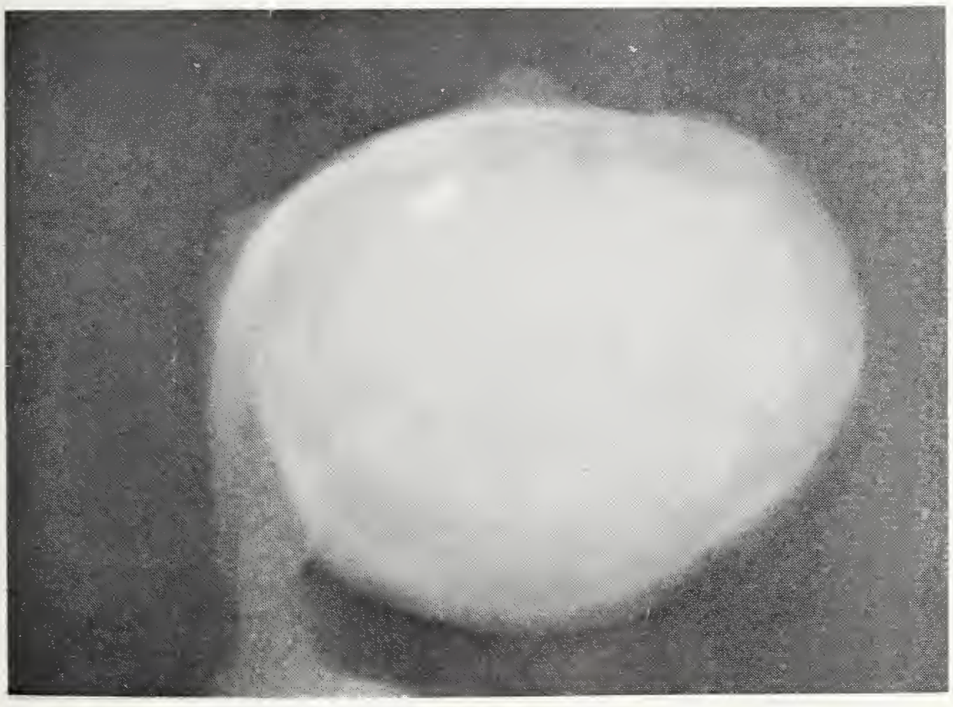


Figure 2B. A radiograph of the resected specimen, showing the abortive tooth and mottled cystic contents to better advantage. The cyst loses its radiographic radiolucency when surrounded by air.

SUMMARY

Not all ovarian dermoids present typical patterns, either pathologically or radiologically. In reviewing the radiologic experience in a series of surgically confirmed dermoids,[2] approximately 40 per cent demonstrated characteristics permitting a specific radiologic diagnosis. In 24 per cent the presence of a mass could be detected, but the pattern was atypical enough so that a specific diagnosis was not feasible. In the remaining 36 per cent the dermoid could not be detected radiographically. ★★★

2500 North State St.

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The President Speaking

'Our Good Right Arm'

JOHN G. ARCHER, M.D.
Greenville, Mississippi

NEVER UNDERESTIMATE the power of a woman. So goes an old saying which, incidentally, is the slogan of a prominent women's magazine with a mass national circulation. Physicians' wives have contributed enormously to good medical care in their roles as homemakers, community leaders, and members of the Woman's Auxiliary. This role is significant and their influence, substantial.

The work of the Woman's Auxiliary can be valuable in a direct supporting movement to medical organization. Auxiliaries have established nursing scholarships, raised funds for AMA-ERF which means medical education and research, and discharged a host of community and civic responsibilities which do our ladies the highest credit. The only trouble is that there are too few of them.

Some physicians' wives have given beyond the call of duty to Auxiliary work. They, like their physician-husbands in medical organization, serve without compensation to make their communities, their state, and nation better places in which to live. They devote themselves to unglamorous tasks, to addressing envelopes, to organizing community activities, and to those jobs for which thanks are often lacking. Informed and well-directed, they make a splendid and remarkable accounting for themselves. And we doctors owe them a vote of thanks.

There's one way we can help our Auxiliary. Where a wife may have neglected to send in her annual dues, where she may be reluctant to accept a particular volunteer job, or where she can furnish a particular talent and ability to assist an ongoing program, the physician can encourage her. Let's aim for an Auxiliary membership in Mississippi which exactly equals the sum total of all our physicians' wives. No doctor of medicine underestimates the power of a woman nor her ability to undertake and discharge high responsibility and exacting tasks in the service of others. ★★★

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EDITORIALS

Malthus and Welfare: A Public Policy on Contraception?

I

A SOCIAL REVOLUTION with pronounced moral overtones is pulling the medical profession off the scientific sidelines onto the field where a 20th century Malthusian dispute is raging. Contraception, once a subject for scientific colloquy and the back yard fence, is an open issue in government and a page one story in the public press. Stripped to basics, it seems to be a matter of Malthus' being more nearly correct about the supply of welfare funds than that of food.

Professional and political euphemisms in this respect are no longer employed when the matter of second and third generation welfare recipients is debated. Mushrooming welfare rolls reflect a leavening of the Aid to Dependent Children program, and many states make no secret about their intention of instituting birth control programs under tax-supported auspices. It is at this point that the physician enters the picture, either as a participant or an adversary.

All chemotherapeutic and most mechanical means of conception control require medical evaluation and supervision. While some physicians with personal or professional reservations—to which they are assuredly entitled—oppose such tax-supported services offered solely for socio-economic reasons, there is no lack of willing and competent medical support for public and private birth control programs. These assume widely varying shapes, scopes, and hues and are by no means confined to any geographic or provincial section.

II

The Illinois program, inaugurated by public welfare authorities a year ago, shook the foundations of the state. To limit births among welfare recipients, both wed and unwed, contraceptive services were offered. A political storm swept the state, and Governor Otto Kerner stepped in to compromise the issue, still far from dead, by ordering services limited to married couples. The Illinois Legislature has since established a commission to study the subject.

A small pilot program under public sponsorship in North Carolina has quietly grown to important proportions with little notice and no public uproar. Beginning with a small rural group, the medically supervised project is satisfying its sponsors. In fact, among a dozen fecund mothers who have been delivered 68 times in a decade, there were no pregnancies during the entire year. Other southern states are known to sponsor general and local programs of similar scope and success.

The legal aspects of these ventures are uncertain, but none is clandestine. The crucial question is whether a state can provide contraceptive services under programs in which federal funds are

involved. At Washington, the matter is conveniently avoided on the amoral bases of a permissive legal climate in the state and the fact that no federal monies are openly dedicated to financing the programs. Nobody is oblivious to the patent reality that federal welfare funds are, indeed, involved. And up to now, nobody has been embarrassed, either, because no statistics in this tenuous connection have ever been published.

III

A show-down in public policy is in the making, and be it good, bad, or indifferent, informed observers feel that states wishing to offer public welfare recipients contraceptive services will get the green light. Illinois has formally submitted its program to HEW's Bureau of Public Assistance for a ruling, thus forcing the federal government to take a position. If there is no change in the initial concept of public assistance as established in 1935, the approval should be forthcoming.

As originally enacted, each of the four category programs of public welfare, including Old Age Assistance, Aid to Dependent Children, Aid to the Blind, and Aid to the Permanently and Totally Disabled, is purely a state venture. None may be implemented unless the state legislature specifically enacts it. The extent and amount of assistance are state prerogatives. In like manner, a state may also terminate one or all such programs at its pleasure. With these deeply rooted concepts so firmly established, any change in federal welfare policy to thwart the will of a state is highly unlikely.

Moreover, the political winds are shifting in Washington. Where the Eisenhower administration maintained a strictly hands-off policy on contraception as a health or welfare-related program, the more liberal incumbent administration is already beyond the stage of cautious exploration. During the current fiscal year, the National Institutes of Health will expend $4 million for birth control research. But the most prominent indicator of all is the Public Health Service's grant of $500,000 to the World Health Organization for this same purpose. Even the State Department has announced officially that foreign nations undertaking family planning programs will be helped with information and "potential sources of assistance."

IV

That the domestic oral contraceptive market is booming is strongly evident. Two major pharmaceutical manufacturers are marketing agents, and two more are seeking FDA approval of like products. Prices for these drugs are steadily decreasing, suggesting world market possibilities. Welfare officials are pointing out what they describe as sheer economic necessities of initiating contraceptive service programs. Those concerned with moral aspects of the issue are speaking out with greater frequency, both pro and con.

Except for policies relating to sterilization, most medical organizations have been silent on public sponsorship of contraception services for welfare recipients. But the Illinois action formally joins the issue to the extent that medicine in that state must soon speak.—R.B.K.

The Great Leap—Backward

"For acute appendicitis, first administer a liberal dose of rhubarb and crushed peony petals, then insert a silver needle into the sensitive area, and finally, draw away the pain by burning a clump of moxa on the skin."

No, this isn't a quote from an ancient scroll; it was published in 1963 in Red China. While no-



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"A lady's here with something red? Probably some kind of a rash."

body knows the full facts, it is reliably estimated that there is only one scientifically trained physician for every 10,000 mainland Chinese. So the People's Republic has turned to the village medicine men and the acupuncturists with their "traditional medicine."

The party line, as espoused by *Kuang Ming,* the Peking newspaper, tells groups of scientific and traditional practitioners this: "The two groups should not only refrain from rejecting each other, but should learn from each other so as to develop each group's strength more satisfactorily."

Word was that the scientific practitioners resented recognition of the traditionalists, but the party has its methods of eliminating such annoyances, as suggested in this official statement: "Some Western-type doctors found it difficult to appreciate the value of traditional medicine until they studied Party Chairman Mao Tse-tung's political writings."

As should be readily suspected, current mortality figures for Red China are conveniently missing.—R.B.K.

JFK's Executive Fiats

At Yuletide, a time when thoughts turn to family, friends, and the blessings of hearth and home, disturbing realities which constitute threats to these blessings seldom come to mind. But they're here just the same, and it may be the most appropriate moment during which to get a little shook up.

Rep. Bruce Alger (R., Texas) supplies the timely reminder as published in the *Congressional Record.* This able Congressman has been close to the issue of compulsory federal medical care through Social Security because he is a member of the House Committee on Ways and Means before which the succession of Forand and King-Anderson bills has been considered. Warning of the abuse of constitutional power by the executive department, Rep. Alger recalls that the first 15 presidents of the United States issued no executive orders. The present incumbent at 1600 Pennsylvania Avenue has cranked out an estimated 11,207 in three years. Eleven such executive fiats, issued for implementation in times of "internal tension, economic or financial crisis," make dictators look as governmentally impotent as the Queen of England:

—Executive Order No. 10995, take over communications media.

—Executive Order No. 10997, take over electric power, oil and gas, fuels, and minerals.

—Executive Order No. 10998, take over food resources and farms, including farm equipment.

—Executive Order No. 10999, take over all modes of transportation, highways, and seaports.

—Executive Order No. 11000, mobilization of civilians into work force under government supervision.

—*Executive Order No. 11001, government take over health, education, and welfare functions.*

—Executive Order No. 11002, Postmaster General operate national registration of all persons.

—Executive Order No. 11003, government take over all airports and aircraft.

—Executive Order No. 11004, housing and finance authorities to relocate communities, build new housing with public funds, designate areas to be abandoned as unsafe, and establish new locations for populations.

—Executive Order No. 11005, take over railroads, inland waterways, and storage.

—Executive Order No. 11051, designates responsibilities of emergency planning and gives authorization to put all other executive orders into effect.

Although not mentioned in the shocking series of executive fiats, there will probably be another issued to provide a free government modification of everybody's television set so that instead of your watching it, it will watch you.—R.B.K.

NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

ARRINGTON, THOMAS HOWELL, Jackson. Born Meridian, Miss., Feb. 25, 1930; M.D., Harvard Medical School, Boston, Mass., 1956; interned University of Mississippi School of Medicine, Jackson, one year; internal medicine residency, University of Mississippi School of Medicine, Jackson, two years; fellowship, University of Mississippi School of Medicine, Jackson, one year; member American Thoracic Society; captain, U. S. Air Force, four years; elected Oct. 1, 1963, by Central Medical Society.

COOK, WILLIAM SAMUEL, Jackson. Born Jackson, Miss., Feb. 14, 1931; M.D., University of Mississippi School of Medicine, Jackson, 1959; in-

terned John Gaston Hospital, Memphis, Tenn., one year; ob-gyn residency, University of Tennessee College of Medicine, Memphis, Tenn., three years; member American Society for Study of Sterility; elected Oct. 1, 1963, by Central Medical Society.

GROCHAU, HENRY BOYD, Greenville. Born Huntsville, Ala., Feb. 9, 1929; M.D., University of Tennessee College of Medicine, Memphis, 1958; interned Baptist Memorial Hospital, Memphis, Tenn., one year; radiology residency, Methodist Hospital, Memphis, Tenn., two years; elected Oct. 9, 1963, by Delta Medical Society.

HEAD, CHARLES MORELAND, Jackson. Born Phoenix City, Ala., Dec. 9, 1929; M.D., Medical College of Alabama, Birmingham, 1957; interned Medical Center, Columbus, Ga., one year; residency, Confederate Memorial Medical Center, Shreveport, La., three years; elected Oct. 1, 1963, by Central Medical Society.

MCCARTY, LEVI BENJAMIN, JR., Jackson. Born Jackson, Miss., Aug. 31, 1932; M.D., University of Tennessee College of Medicine, Memphis, 1957; interned City of Memphis Hospitals, Tenn., one year; residency, University of Tennessee College of Medicine, Memphis, three years; elected Oct. 1, 1963, by Central Medical Society.

MCRAE, JOHN MURRELL, JR., Greenville. Born Memphis, Tenn., Aug. 14, 1930; M.D., Harvard Medical School, Boston, Mass., 1956; interned University of Mississippi School of Medicine, Jackson, one year; general surgery residency, University of Mississippi School of Medicine, Jackson, six years; elected Oct. 9, 1963, by Delta Medical Society.

NEWTON, ISAAC ALTON, JR., Greenville. Born Bolton, Miss., March 26, 1932; M.D., University of Tennessee College of Medicine, Memphis, 1955; interned John Gaston Hospital, Memphis, Tenn., one year; assistant resident, internal medicine, John Gaston Hospital, Memphis, Tenn., one year; associate resident, internal medicine, John Gaston Hospital, Memphis, Tenn., one year; Fellow in cardiology, John Gaston Hospital, Memphis, Tenn., one year; elected Oct. 9, 1963, by Delta Medical Society.

ROSE, WALTER HENRY, Indianola. Born Augusta, Ga., Oct. 31, 1932; M.D., University of Mississippi School of Medicine, Jackson, 1962; interned University of Mississippi School of Medicine, Jackson, one year; elected Oct. 9, 1963, by Delta Medical Society.

ROSS, JERRY MARTIN, Whitfield. Born Corinth, Miss., May 21, 1934; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned U. S. Public Health Service Hospital, Seattle, Wash., one year; psychiatry residency, U. S. Public Health Service Hospital, Lexington, Ky., one year; elected Sept. 3, 1963, by Central Medical Society.

TILL, GLENN KERMIT, Jackson. Born Puckett, Miss., June 16, 1935; M.D., University of Mississippi School of Medicine, Jackson, 1962; interned Tampa General Hospital, Fla., one year; elected Oct. 1, 1963, by Central Medical Society.

Saunders Announces Recent Publications

W. B. Saunders Company features the following new books appearing elsewhere in this issue:

ATOMIC ENERGY ENCYCLOPEDIA OF THE LIFE SCIENCES—Edited by C. W. Shilling

A unique new volume for those seeking general information on applications and effects of atomic energy in the fields of medicine, biology, and agriculture.

CURRENT PEDIATRIC THERAPY—Edited by Gellis and Kagan

This new book gives you the best treatments, currently in use by leading authorities, for over 300 diseases and disorders that afflict children.



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"Any chance of your moving to a dry, warm climate?"

Book Reviews

Psychosomatic Medicine. Edited by John H. Nodine, M.D., and John M. Moyer, M.D. 1002 pages. Philadelphia: Lea and Febiger, 1962. $16.50.

Psychosomatic Medicine is a lengthy treatise of 120 chapters compiled by 135 contributors. The chapters are grouped according to their subject matter, and at the end of each section is a panel discussion of selected questions put to the panel by a moderator. In these panel discussions, which are perhaps the outstanding feature of the book, the panelists have attempted to critically assess their current facts and conclusions. In so doing, areas of disagreement are discussed and clarified.

The book begins with a classification of psychiatric illnesses and points up some of the inadequacies of the varied systems of nomenclature. It then proceeds to a lengthy discussion of psychologic testing, psychodynamics, cerebral chemistry and physiology, and psychopharmacology. These sections will not interest either the general practitioner or the internist and will be of little value to the psychiatrist.

It then proceeds to a very interesting and complete section on tranquilizers. This is the part of the book that will be of most value to the practicing physician. All of the ordinary drugs, plus several which have been removed from the market, and a few experimental drugs, are discussed in detail. The only criticism of this part of the book is that generic names are used instead of trade names, and very few physicians are familiar with the generic names of these drugs. This defect is compensated for, however, by a table in the back converting the generic names to trade names and vice versa.

The book is concluded by sections discussing therapy of the various neuroses, psychoses, and psychosomatic and somatopsychic conditions, with shorter chapters on emotional aspects of the surgical patient, the cancer patient, and patients with chronic illnesses. The chapters on alcoholism will prove extremely valuable to those meeting that disease in their practice.

The theme of the book can best be described by a quotation from Watts, who said, "Besides the drug, the patient needs the personality of the doctor behind it. One source of comfort does not exclude the other—they must be added together, and used together."

This book is recommended as an easily read source of valuable information on all aspects of psychosomatic illnesses and all tranquilizers and so-called energizers.

WILLIAM E. WEEMS, M.D.

Primer of Clinical Measurement of Blood Pressure. By George E. Burch, M.D., Henderson Professor of Medicine, Tulane University School of Medicine, New Orleans, and Nicholas P. DePasquale, M.D., instructor in medicine, Tulane University School of Medicine, New Orleans. 141 pages with illustrations. St. Louis: The C. V. Mosby Company, 1962. $5.50.

"Although the arterial blood pressure is measured many times a day by doctors all over the world," states the author, "few physicians have devoted much thought to the problems and principles involved in measuring blood pressure accurately." This monograph is divided into seven chapters. The first chapter deals with the history of the recording of blood pressure. Although this may not be important to a practicing physician, it is quite interesting as this phase of medicine is not taught to the doctor during his training days.

The second chapter deals with the physiology of the arterial blood pressure. It is easily readable and is an excellent review of fundamental physiology to which most physicians probably have not given much thought for many years.

The third chapter deals with the clinical measurement of arterial blood pressure. The authors discuss the differences between a mercury and aneroid manometer, the advantages and disadvantages of both. A brief discussion is also found in this chapter concerning the differences and types of cuffs used on manometers, mainly the rubber compression bladder and the cloth cuff. One most important item mentioned in this chapter is that the width of a cuff should be 20 per cent greater than the diameter of the extremity in which the pressure is being measured. This is one item that I think most physicians overlook from time to time. Also in this chapter the various factors which influence the reading of the arterial blood pressure are discussed, and also the various techniques of blood pressure measurements are reviewed.

Chapter four deals with the sources of error in the clinical determination of the arterial blood pressure; these being faulty technique, defective apparatus, physician error, and failure to consider the patient adequately. The factors that affect the arterial blood pressure are discussed in chapter five. The factors of age and body weight are known to all physicians. A mention in this chapter is also made of sex, race, heredity, pregnancy, climate, weather, altitude, sleep, diet, and occupation, all of which are wise for the physician to consider when he is determining whether treatment is in order for the blood pressure condition. Chapter six deals with the normal values of arterial blood pressure.

The final chapter deals with diagnostic applications of arterial blood pressure measurements. Mention is made in this chapter that not only can the measurement of arterial blood pressure be used to differentiate normal from abnormal levels of blood pressure, but it may also be used to evaluate various normal and abnormal physiological states that are reflected by the changes in the arterial blood pressure. Some of the important diagnostic applications of pressure measurements discussed are differences between blood pressures in the arms and legs, pulsus alternans, pulsus paradoxus, pulse pressure, cold pressor tests, Regitine tests, and Histamine Phosphate tests.

This monograph, although brief, is concise and well written. It summarizes briefly the principles, techniques, and precautions involved in recording blood pressure clinically. A fairly complete bibliography is appended for those who wish to investigate selective problems in detail. Although the book is intended for undergraduate and postgraduate students of medicine, it is certainly a good review for any physician.

DAVID L. CLIPPINGER, M.D.

Surgery. First edition. By Richard Warren, M.D., Clinical Professor of Surgery, Harvard Medical School, Boston, Mass. 1395 pages with illustrations. Philadelphia: W. B. Saunders Company, 1963. $19.50.

This new textbook of surgery was written by Dr. Richard Warren in collaboration with 23 other surgeons, most of whom are on the staff of the Harvard Medical School in the department of surgery. Most of these authors are real giants in the field of surgery in the United States. Dr. Warren states in the preface that this volume is created in hopes to fill a vacuum which existed after the publication of Dr. Homans' *Textbook of Surgery* until the present time. It is this reviewer's opinion that the authors have done an excellent job in fulfilling their goal.

The text would be an invaluable addition to a medical student's library, as well as that of a finished practicing surgeon. It contains 34 chapters devoted to practically all surgical conditions arising in the human body. The author's style of writing is most effective, quite clear, and understandable. The book is lavishly illustrated by excellent artists, and this point adds tremendously to the effectiveness of the volume. The subject material is well organized in each chapter and thoroughly covered. As is widely known, many textbooks by the time of their publication are antiquated. I would have to honestly say that this is one of the most up-to-date texts that I have seen in many years.

The book contains a 33 page index with three columns of subjects on each page. The index has been meticulously prepared and easy reference is attained immediately.

In summary, I would say that this is one of the finest textbooks of surgery that I have had the opportunity to study, and I feel that the expenditure of $19.50 by a medical student, general practitioner, or surgeon alike would be a valuable investment. The book would be useful on many occasions and would not be one that would gather dust on the physician's library shelf.

THOMAS G. BARNES, M.D.

Books Received

The Clinical Impact of a Quarter Century of Cancer Research. By the American Cancer Society, Inc., New York, N. Y. 192 pages with illustrations. New York: The American Cancer Society, Inc., 1963.

The Electrocardiogram and Chest X-ray in Diseases of the Heart. By Arthur M. Master, M.D., Richard P. Lasser, M.D., Isadore Rosenfeld, M.D., and Ephraim Donoso, M.D. 565 pages with 376 illustrations. Philadelphia: Lea and Febiger, 1963. $21.00.

A Doctor Discusses Pregnancy. Second edition. By William G. Birch, M.D., and Dona Z. Meilach, Ph.B. 120 pages with illustrations. Chicago: Budlong Press Company, 1963. $1.50.

Elementary Medical Statistics. By Donald Mainland, M.B., Ch.B. 381 pages. Philadelphia: W. B. Saunders Company, 1963. $9.00.

AMA and FDA Begin New National 'Quackdown' On Annual $1 Billion Bilk with Two-Day Congress

The American Medical Association and the U. S. Food and Drug Administration signaled beginning of a new joint crackdown on health frauds with sponsorship of the Second National Congress on Medical Quackery at Washington, Oct. 25-26. The invitational meeting brought together leaders of state medical associations, law enforcement agencies, and organizations concerned about the estimated $1 billion a year public bilk by quacks and worthless nostrums.

Dr. John G. Archer of Greenville, president of the state medical association, was Mississippi medicine's chief representative at the congress. Warm in his praise of the meet, Dr. Archer said that "the Second National Congress on Medical Quackery will stimulate new efforts at state and local levels to alert the public about medical quacks and health charlatans who peddle worthless treatments, useless mechanical gadgets, fake nostrums, food fads, and reducing pills which do not reduce.

"The problem of quackery is an urgent one," Dr. Archer added. "It requires constant vigilance on the part of physicians, medical organization, and agencies of government having enforcement and regulatory responsibilities."

Opening sessions of the congress were addressed by HEW Secretary Anthony J. Celebrezze and AMA President Edward R. Annis. Secretary Celebrezze stressed the interest of the department and its two health-related arms, the U. S. Public Health Service and Food and Drug Administration, in stamping out quackery. He drew a spontaneous ovation with the surprise announcement that HEW had officially pronounced the controversial "anti-cancer" agent, krebiozen, as worthless, which would henceforth ban its shipment in interstate commerce.



"I look more like an internist than you," says actor Raymond Massey, center, the famed Leonard Gillespie, M.D., F.A.C.P., of the "Dr. Kildare" TV series, to MSMA's Dr. John G. Archer, right. Surgeon Edward R. Annis, AMA president, rounds out the group as they view exhibits at the Second National Congress on Health Quackery.

Dr. Annis said, "Ironically, our modern age has given quackery a big boost. True, the market for wolf elixirs from the sacred tombs of ancient Egypt wouldn't be as great today as it was a century ago. But dolled up in new finery of scientific jargon, the same old 'cure anything' pitch of the 18th century hawker gets wide acceptance."

Other featured speakers included Deputy Postmaster General Sidney W. Bishop, who discussed mail frauds in quackery and the work of the Postal Inspection Service in combatting

them. FDA Commissioner George Larrick recounted successful prosecutions by his group, and Paul R. Dixon, chairman of the Federal Trade Commission, outlined similar actions regarding fake advertising and labeling.

The final session was devoted to mass communications media and the roles they play in fighting health frauds. Representatives of the newspaper, radio, television, magazine, advertising, and publishing industries spoke.

The congress received wide press and TV coverage with one newsman present for every eight registrants, meeting officials said. Of interest equal to the blue ribbon speakers were exhibits presented by AMA, FDA, the Post Office Department, American Cancer Society, and the Arthritis and Rheumatism Foundation.

A meeting highlight was the appearance of Raymond Massey, noted actor who portrays the stern Dr. Leonard Gillespie of the "Dr. Kildare" television series, who addressed a luncheon. Invited registrants totaled 800 with about 100 representatives of mass news media present. All sessions were held at the Sheraton Park Hotel.

Awards To Be Given For Sterility Research

The annual meeting of the American Society for the Study of Sterility has been scheduled for May 15-17, 1964, at Bal Harbour, Fla. Three awards will be presented to physicians making meritorious contributions to the society, according to Dr. Michael Newton of the University of Mississippi School of Medicine, chairman of the awards committee.

The Ortho Medal and the sum of $1,000 will be awarded to a recipient selected by the awards committee on the basis of his outstanding contributions in fertility and sterility or related subjects in recent years. The money is to be used by the recipient for expenses in visiting medical and research centers of his choice.

The Rubin Award, consisting of a certificate of merit and the sum of $250 will be awarded to the author or authors whose paper is deemed by the awards committee to be the most significant contribution among those appearing in the society's journal, *Fertility and Sterility,* during the year 1963.

The Carl G. Hartman Grant-in-Aid in the amount of $500 will be awarded to the most meritorious research project in fertility and sterility or related subjects, as chosen by the awards committee. Applications for this grant-in-aid should be sent to Dr. Newton, 2500 North State Street, Jackson 6, Miss., before March 15, 1964.

Medical Journal Leaders Meet at Chicago



Dr. Frank B. Ramsey of Indianapolis, Ind., left, chairman of the State Medical Journal Advertising Bureau's board of directors, discusses medical publishing with Dr. Lawrence W. Long of Jackson, chairman of MSMA's Committee on Publications, at the recent biennial SMJAB Conference of State Medical Journal Representatives in Chicago.

State Crash Injury Study Enters Second Period

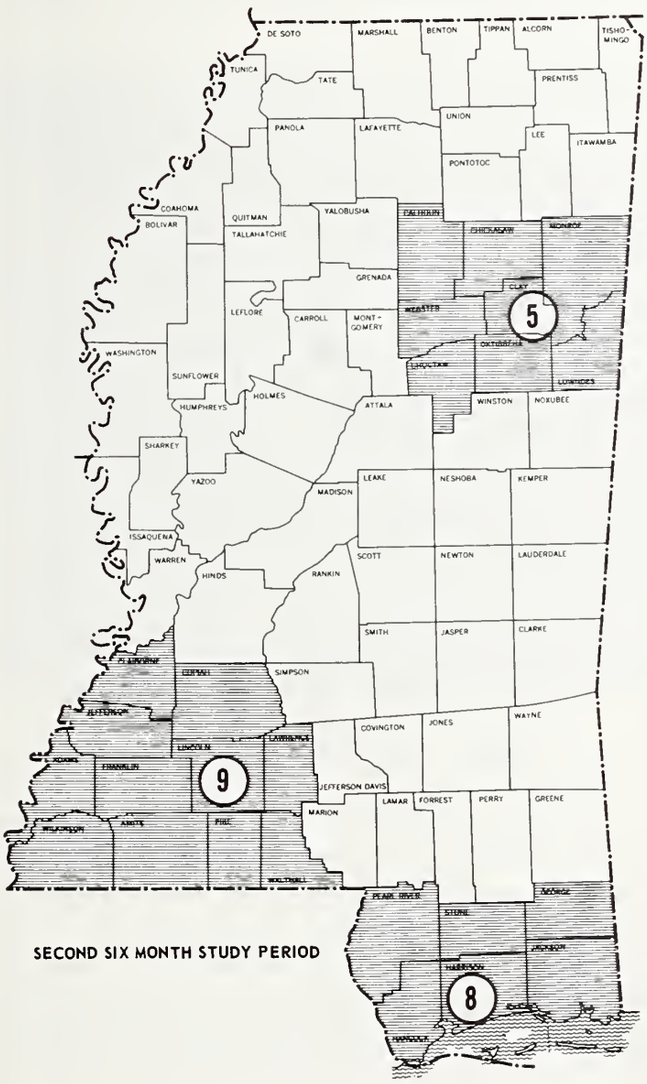
Physicians in 25 Mississippi counties will be asked to participate in the automotive crash injury studies of the Cornell Aeronautical Laboratory, Inc. beginning Jan. 1.

This marks the beginning of the second six month study period in the two year study devoted to Mississippi. The first period began July 1, 1963. Counties included in the second sampling are Calhoun, Chickasaw, Monroe, Webster, Clay, Choctaw, Oktibbeha, Lowndes, Claiborne, Copiah, Jefferson, Adams, Lincoln, Lawrence, Franklin, Wil-

kinson, Amite, Pike, Walthall, Pearl River, Stone, George, Harrison, Jackson, and Hancock.

Mississippi is the 25th state in which the state medical association, the state department of health, the state hospital association, and the state highway patrol have agreed to cooperate. Physicians will be asked to provide medical information during the six month period in which their county is represented in the sampling area. On an average there will be 20 counties included in any one period.

When one or more occupants in a passenger car of one of the last four year models is injured, the state highway patrol officer assigned to investigate the accident will have two extra tasks to perform. He will be asked to take photographs of the damaged portions of the car and provide certain information with respect to the relationship of injury with car structure. He will also be asked to deliver the Cornell medical report form, one on each injured person, to the hospital emergency room or doctor's office where the injured are taken or to the county coroner for passengers killed in the crash.



SECOND SIX MONTH STUDY PERIOD

When the physician has completed the forms, they will be forwarded by the hospital to the State Board of Health. The form for physicians is brief, and since it is anticipated that reports will be sought on no more than four injured individuals per day in the average 20 county study area, the likelihood is small that any particular doctor will need to report on more than four or five occasions.

Dr. N. C. Knight, director, Accident Prevention Program of the Mississippi State Board of Health, will coordinate the medical aspects of the program. His office will receive the reports from the State Highway Patrol and from physicians and will forward them to Cornell.

Since its inception, the purpose of the Cornell research has been to obtain reliable data on the specific causes of injury to occupants of cars involved in accidents rather than on the causes of the accidents.

Information from the interstate ACIR program served as a basis for the designing of passenger protection devices such as seat belts, improved door latches, energy-absorbing steering wheels, and padding with which automobile manufacturers began equipping their cars in about 1955. Now, one of the purposes of the program is to collect data for use in evaluating the effectiveness of those recently adopted safety devices, as well as in showing the need for additional protection.

Dr. Gerald Wessler Named Coast Society President

Dr. Gerald Wessler of Gulfport was elected president at the Nov. 6 meeting of the Coast Counties Medical Society. He succeeds Dr. Wallace E. Calhoun of Moss Point.

Other officers elected were Dr. Frank G. Gruich of Biloxi, president-elect; Richard F. Gates of Gulfport, vice president; Dr. C. D. Taylor, Jr., of Pass Christian, secretary, and Dr. C. Hal Cleveland of Gulfport, treasurer.

Dr. B. B. O'Mara of Biloxi was elected to a three-year term on the Society's governing board; Dr. George W. Vickery of Gulfport a two-year term, and Dr. F. C. Minkler, Jr., of Pascagoula, a one-year term.

Delegates elected to the Mississippi State Medical Association were Dr. A. K. Martinolich, Jr., Hancock County; Dr. Archibald C. Hewes and

Dr. D. L. Hollis, Harrison County; Dr. William J. Weatherford, Jackson County; and Dr. Gordon S. McHenry, Stone County.

Component Societies Asked For Robins Award Nominees

Nominations are now being accepted from component medical societies for the third annual MSMA-Robins award, according to Dr. John G. Archer, MSMA president.

Recognizing outstanding community service by a physician, this year's award will be presented during the 96th Annual Session scheduled for May 11-14 in Jackson, he said.



Deadline for the 1964 nominations is Jan. 31. Each component society may submit one nomination from among its membership with the nomination made in letter form and signed by a society officer.

Criteria for the award program were established in 1961 by the MSMA Board of Trustees. Nominees must have been members in good standing of MSMA at the time the community service was rendered and when the award is actually made. The service recognized should be apart from purely professional attainment since suitable awards in these connections already exist, should have benefitted the local or state community in a civic, cultural, or general economic sense, should have been performed voluntarily and, except in unusual circumstances, should have been uncompensated. The service need not, however, necessarily have been a single achievement.

From the maximum of 16 possible nominees, one from each component society, a final selection will be made by a board of judges representing geographical regions of the state.

The MSMA-Robins Award was established in 1962 in conjunction with the A. H. Robins Company of Richmond, Va., a long-established and respected manufacturer of ethical pharmaceuticals. Winner of the first award was Dr. Thomas G. Ross of Jackson. The 1963 award winner was Dr. Frank M. Davis of Corinth.

1963 Diabetes Week Conducted Nov. 17-23

Diabetes Week 1963 was conducted Nov. 17-23 with a goal of informing the public of the symptoms of diabetes and to detect undiagnosed diabetics.

The week was sponsored by the American Diabetes Association in cooperation with its 50 affiliate associations and with more than 900 state and county medical societies.

The association estimates that there are over 1,400,000 unknown diabetics in the United States —an increase of 400,000 since 1950.

Diabetes Week closed out the year-round Diabetes Detection Drive which was an intensive campaign to inform the public of this health problem.

New Orleans Assembly Announces March Meet

The New Orleans Graduate Medical Assembly will meet for its 27th annual session March 2-5, 1964, with headquarters at the Roosevelt Hotel.

Nineteen guest speakers will participate. The program will include 55 informative discussions on topics of current medical interest, in addition to clinicopathologic conferences, symposia, medical motion pictures, round-table luncheons, and technical exhibits.

Following the meeting in New Orleans, arrangements have been made for a clinical tour to Europe leaving via air on March 7. The itinerary includes visits to Lisbon, Madrid, Rome, Vienna, Berlin, and Paris with the return set for March 28.

Details of the New Orleans meeting and the tour may be obtained from the office of the assembly, 1430 Tulane Ave., New Orleans, La. 70112.

Five State Doctors Inducted Into ACS at Clinical Meet

Five Mississippi physicians were inducted into the American College of Surgeons on Oct. 31 during the annual five-day Clinical Congress. This year's meeting convened in San Francisco.

Taking part in the cap-and-gown ceremonies, which involved approximately 1,050 new Fellows, were Dr. Dennis E. Ward, Corinth; Dr. Paul S. Derian, associate professor, department of surgery

and chief of the division of orthopedics, University of Mississippi School of Medicine, Jackson; Dr. Joseph E. Lofton and Dr. E. Frederick Richard, Keesler Air Force Base, Biloxi, and Dr. Robert H. Barnes, Natchez.

The ACS, celebrating its 50th anniversary this year, is a voluntary, educational, scientific, and nonprofit association of surgeons founded in 1913 for the sole purpose of improving care of the surgical patient. The college has grown in 50 years from a founding group of 450 surgeons of Canada and the United States to a total international membership of approximately 26,200 Fellows in 79 nations.

Fellowship is awarded to those surgeons who fulfill comprehensive requirements of acceptable medical education and advanced training as specialists in one or another of the branches of surgery.

325 Attend UMC Pre-Med Day



Hundreds of upperclass college students jammed the University of Mississippi School of Medicine foyer as they arrived for Pre-Med Day on Oct. 16. Tours began promptly at 9 a.m., and gradually 325 visitors from 19 different junior and senior colleges cleared the foyer. In groups of 10 or 12, they toured the University Medical Center, going quickly from one department's exhibits to another. Finally, after three hours of walking and looking and listening, all 325 had had an authentic glimpse of medical school. Among other things, they saw (above) a demonstration of the heart-lung pump.

MSMA Publishes 1964 Directory

The 1964 edition of the Directory of the Mississippi State Medical Association has been published and is ready for shipment.

The Directory lists every physician licensed to practice medicine in Mississippi with names of MSMA members printed in all capitals. The volume gives the name and address of each physician, the county in which he is located, and his membership status in his county medical society, the Mississippi State Medical Association, and the American Medical Association.

The Directory is provided with a special key showing degrees of membership in medical organization, e.g. emeritus and retired status, and physicians who are temporarily in military service or postgraduate training. Federal medical officers, i.e., Veterans Administration, are so identified.

MSMA members receive the Directory free. The charge to non-members is $3 per copy including handling and shipping.

A Monthly Directory Supplement is also available to association members and purchasers of the Directory. The subscription rate for the supplement is $6 per year.

AMA Clinical Meet Set for Portland

Prominent physicians from all over the United States are scheduled to appear before the American Medical Association's 17th Clinical Meeting Dec. 1-4 in Portland, Ore.

A featured symposium of the meeting will be problems of adolescent patients to be discussed by Dr. Frank H. Douglass, Seattle; Dr. J. L. Fromer, Boston; Dr. Felix P. Heald, Washington, D. C.; Dr. Solomon Kaplan, Los Angeles; Dr. Janet McArthur, Boston; Dr. Adolph Christ, Seattle, and Dr. Donald B. Sloxum, Eugene, Ore.

Other subjects to be covered by speakers during the four-day meeting include heart and blood vessel surgery; peptic ulcer; the practical clinical approach to anticoagulants, metabolic obesity, anemia, edema, and undiagnosed fever; urology; obstetrics and gynecology; trauma as it relates to everyday noises; smoking in relation to mortality

and morbidity, and causes of death in automobile accidents.

Guest lecturer on the scientific program Dec. 4 will be Professor C. H. Stuart-Harris, director of the department of medicine of the University of Sheffield, Sheffield, England. He will deliver an hour-long paper on "Shortness of Breath." Professor Stuart-Harris, who has written numerous books and papers on pulmonary disease, is particularly interested in the infectious and viral diseases and chronic and nonspecific pulmonary disease.

Dr. Joseph B. Trainer, of the University of Oregon Medical School, working closely with the AMA Committee on Medical Motion Pictures and Television, has announced a varied and extensive live, closed circuit television program to be shown to physicians during the clinical meeting. Thirty physicians will take part in this program which will cover eye examinations; resuscitation techniques and their utilization in surgery, obstetrics, and in coronary disease; psychiatric evaluation of the alcoholic; a tumor clinic session; the crippled child, and the diagnosis and surgical approaches to the relief of deafness.

The tumor clinic program will be handled exclusively by staff members of the University of Oregon Medical School with Dr. William W. Krippaehne serving as chairman.

The AMA House of Delegates will meet Dec. 2-4. Mississippi delegates are Dr. J. P. Culpepper, Jr., of Hattiesburg, and Dr. George E. Twente of Jackson. Alternate delegates are Dr. G. Swink Hicks of Natchez and Dr. Stanley A. Hill of Corinth.

Mississippians Attend Anesthesiologist Meet

Three Mississippians played prominent roles as the American Society of Anesthesiologists convened for its annual business and scientific meeting Nov. 2-6 at the Palmer House in Chicago.

Dr. T. J. Marland of Jackson served as Mississippi's representative to the 135-member House of Delegates, the society's policy-making body. While in session the House acted on recommendations made by the society's committees, officers, and district directors.

Dr. C. H. Webb, Jr., of Jackson was alternate delegate from Mississippi.

In the scientific sessions, Dr. J. R. Youmans of the Department of Neurosurgery, University of Mississippi School of Medicine, discussed "Arterial Oxygen Tension During Induction and Course of Anesthesia." Over 3,000 top medical specialists in anesthesiology from the United States and abroad took part in the five-day scientific session.

UMC Names Dr. Langford Acting Medicine Chairman

Dr. Herbert Langford, associate professor of medicine, has been appointed acting chairman of the department at the University of Mississippi School of Medicine, following the resignation as chairman of Dr. J. R. Snavely.

Dr. Snavely, who resigned because of ill health, will continue to serve as professor of medicine part-time. A committee headed by Dr. James D. Hardy, chairman of the University department of surgery is currently reviewing candidates for the medicine chairmanship.

Dr. Parsons Named ACS Delegate Director

Dr. Williard H. Parsons of Vicksburg was named delegate director for the American Cancer Society's newly constituted board of directors at the annual meeting held Oct. 21-25 in New York.

Dr. Parsons, accompanied by Dr. A. V. Beacham of Magnolia, president of the Mississippi Division, and three nonprofessional delegates, witnessed the structural re-organization of the ACS government board. The re-organization, voted on last year, creates broader local representation to the national board. The new board of directors includes a minimum of one delegate director from each state and the District of Columbia, 15 proportional delegate directors based on the population of a state, and 38 directors at large.

Mississippi's new delegate director is former chief of staff at the Vicksburg Hospital and Clinic and is associate clinical professor of surgery at the University of Mississippi School of Medicine. He is associated with Parsons, Whitaker and Neill Clinic in Vicksburg. Dr. Parsons is past president of the Mississippi Division of the American Cancer Society, past president of the Vicksburg Hos-

pital Medical Foundation, and is currently serving as vice chairman of the Board of Regents of the American College of Surgeons.

MHA Now Accepting 1964-65 Grant Applications

The Mississippi Heart Association is now receiving applications for its 1964-65 research program, according to Miss Lucile Little, executive director. Applications must be received on or before March 1, 1964.

The grants are made to nonprofit institutions in direct support of a particular investigator for a specific program of research under his direction. Grants are awarded in support of research in the cardiovascular field or basic sciences related to it for periods of one to three years.

Applications will be reviewed by the Research Grants and Fellowships Committee of the Mississippi Heart Association. Grants will be approved on or about April 1, and awards will be announced July 1.

Further information and application forms may be secured from Miss Little at MHA headquarters, 145 East Amite St., Jackson.



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"I got these glasses at the drug store for a dollar and that ophthalmologist across the street wanted . . ."

LSU Faculty Members Conduct Southwest Seminar

Four members of the Louisiana State University Medical faculty addressed the Southwest Mississippi Academy of General Practice at the Oct. 31 seminar held in McComb.

Participating on the program were Dr. Silas E. O'Quinn, assistant professor of dermatology, who presented a paper on "Current Treatment of Some Common Skin Diseases," and Dr. John N. Bickers, assistant professor of medicine, who discussed "The Treatment of Leukemia—A Re-evaluation in the Light of Current Knowledge."

"Hopeless Yesterday—Treatable Today" was the topic considered by Dr. Bettina C. Hilman, assistant professor of pediatrics. Dr. Rafael C. Sanchez, director of the Louisiana State University and Louisiana Academy of GP Continuing Education Program, concluded the program with a discussion on "Partnership in Learning."

Dr. A. V. Beacham of Magnolia served as chairman of the program.

Sponsored by the Mississippi Academy of General Practice in cooperation with Eli Lilly and Company, the scientific program was acceptable for four hours Category 1 Credit by MAGP.

PERSONALS

AUBREY V. BEACHAM has been elected to the board of directors of the Magnolia Chamber of Commerce.

THOMAS N. BRADDOCK, JR., of West Point has been elected to the board of directors of the Clay County Chamber of Commerce.

RICHARD G. BURMAN, BEDFORD F. FLOYD, JR., and ABRAHAM N. MORPHY have been named committee chairmen of the West Harrison County Unit, Mississippi Division of the American Cancer Society.

ORGANIZATION / Continued

JACK V. KING of Jackson has recently been certified by the American Board of Colon and Rectal Surgery. Dr. King is also a Diplomate of the American Board of Surgery.

LEON LENOIR, JR., of Greenville has announced the association of ROBERT E. LEE in the practice of internal medicine. Dr. Lee received his medical degree from Tulane University School of Medicine, New Orleans, La., and interned at St. Thomas Hospital, Nashville, Tenn. He completed his residency at the Veterans Administration Hospital, New Orleans, La.

RAMON C. LOTT of Tylertown has announced the opening of his office for the general practice of medicine in Noxapater. Dr. Lott received his medical degree from the University of Mississippi School of Medicine and completed his internship at the Medical Center, Columbus, Ga.

R. R. MCGEE of Clarksdale has been named president of the Coahoma County Hospital medical staff. Elected to serve with Dr. McGee were: VAN R. BURNHAM, JR., vice president, and WILLIAM B. BOBO, secretary. The executive committee will be composed of R. L. FORMAN, STEVE C. LEIST, and R. RUBISOFF.

FRANK L. MARASCALCO and DONALD R. ELLIS of Clarksdale have announced the association of LEE S. SMITH in the practice of gynecology and obstetrics at the Woman's Clinic. Dr. Smith received his medical degree from the University of Tennessee College of Medicine, Memphis, interned at Holston Valley Community Hospital, Kingsport, Tenn., and completed his residency at Baroness Erlanger Hospital, Chattanooga, Tenn.

WILLIAM G. MUNN has announced his association in the practice of medicine with the Allen Clinic in Mendenhall. Dr. Munn, a native of Mendenhall, received his medical degree from the University of Tennessee School of Medicine and completed his internship at Brooke Army Hospital, San Antonio, Texas.

WILLIAM W. OSER of Picayune has been elected chief of the medical staff of Crosby Memorial Hospital. DENNIS E. MAGEE was elected vice chief and JOSEPH C. GRIFFING was elected secretary-treasurer.

JAMES W. SANDERS OF De Ridder, La., and JAMES BARTON KENDRICK of Houston, Texas, have joined the staff at Rush Memorial Hospital in Meridian. Dr. Sanders received his medical degree from Louisiana State University School of Medicine and completed his internship at the U. S. Naval Hospital, Pensacola, Fla. He served his residency in obstetrics and gynecology at the U. S. Naval Hospital in Philadelphia, Pa. Receiving his medical degree from the University of Mississippi School of Medicine, Dr. Kendrick served his internship at St. Thomas Hospital, Nashville, Tenn.

EUEL G. TUTOR, JR., of Greenville has been elected a Fellow of the American Academy of Pediatrics.

JAMES C. WAITES of Laurel has been elected president of the University of Southern Mississippi Alumni Association. Dr. Waites is past president of the Jones County alumni chapter.

WILLIAM C. WINANS, Pike County health officer, recently participated in an Atomic Energy Commission study at the University of Nevada. The course dealt with planned underground nuclear detonations which are to take place near Hattiesburg, Miss. during the month of February. Dr. Winans is an AEC medical liaison officer for South Mississippi.

UMC Cancer Seminar Set for Dec. 4

An all-day Cancer Seminar is scheduled for Dec. 4 at the University Medical Center.

Guest speakers will be Dr. James P. Cooney, vice president for medical affairs of the American Cancer Society, and Dr. C. Gordon Zubrod, director of intramural research at the National Cancer Institute. They will discuss progress in cancer research and control and control of acute leukemia.

Faculty from the Medical Center will include Dr. Michael Newton, chairman of the department of obstetrics and gynecology, who will speak on surgical problems in carcinoma of the cervix; Dr. James D. Hardy, chairman of the department of surgery, who will discuss systemic effects of nonendocrine tumors; Dr. W. M. Flowers, radiology resident, who will describe radiation therapy of esophageal carcinoma, and Dr. Gussie Higgins, currently a fellow in hematology at the Los Angeles Children's hospital, who will review experience with acute leukemia at the university from the time it opened until the present.

The seminar is planned jointly by the Professional Education Committee of the American Cancer Society, Mississippi Division, Inc., chaired by Dr. Robert Q. Marston, dean of the University School of Medicine and UMC director, and by the UMC Postgraduate Education Committee. An educational grant from the state cancer society makes it possible to offer this course.

Program coordinator is Dr. Warren N. Bell, chairman of the clinical laboratory sciences department.

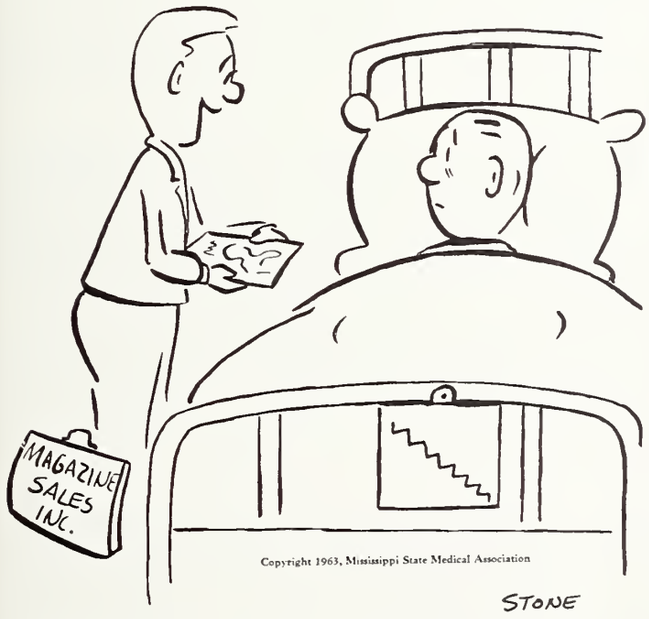
University Psychiatric Unit Opens Day Care Program

Intensive day care for selected psychiatric patients has been inaugurated at the University Medical Center.

The plan is based on a pilot study completed last summer. At a Psychiatric Day Hospital Workshop held in Kansas City in September, participants learned that 50 to 60 per cent of all psychiatric admissions could be handled on a day-care basis and that even suicidal intent is not always a limiting factor.

Day patients are admitted to the UMC Psychiatric Diagnostic and Treatment Unit by referral only. The referring physician should write or call the unit and outline the case. If the evaluative interview indicates that day care is advisable, a treatment program is tailored to the patient and his special milieu. He may come to the hospital from 8:30 a.m. to 4:30 p.m. five days a week or less. Maximum charge for one day is $14.00 including hospital and professional fees. If day care is contraindicated, an alternative plan is suggested to the referring physician.

The new program is designed to use the university's psychiatric facilities for more patients, with resultant benefit to the teaching program.



"Could I interest you in a lifetime subscription?"

MSMA-DGB Keogh Plan Nears Tax Year End

First year operation of the MSMA-Deposit Guaranty Bank Physicians Retirement Program under the Keogh law will end Dec. 31, according to association and bank officials. Participating physician-members will be informed of their total deposits as a matter of tax record under the automatic protection plan against over-deposit and resultant penalties.

Bank trust department spokesmen said that physician interest had peaked as a rush was made to secure 1963 calendar year tax credits by late entry into the program. The MSMA-DGB plan is virtually unique in that no acquisition fees are charged: one dollar invested, the announcement said, results in an immediate equity of 100 cents. Management of the fixed income and equity funds making up the physicians' plan is administered by trust experts.

Although the present law permits some degree of tax savings for nearly every self-employed individual, observers say that Keogh program will become even more attractive to those preparing voluntarily for retirement if H.R. 8711 by Rep. Eugene Keogh (D., N. Y.) is enacted in the present Congress. Measure would permit full deduction of 10 per cent or $2,500 of annual income and remove percentage and dollar limitations for self-employed who establish plans for employees. A similar measure is being sponsored in the senate by Sen. George Smathers (D., Fla.).

Outdated Laws Hinder Organ Transplant Research

Medical advances in transplanting human organs from one patient to another are running up against outdated legal barriers in many instances.

A booklet now available from the American Medical Association outlines this problem and

advises potential donors on the necessary steps. Entitled "Leaving Your Body to Medical Science," it is a report of the Committee on Medicolegal Problems and may be secured from AMA.

Under common law, a dead human body is not recognized as property which can be disposed of as merchandise. However, the next of kin has been held to have the right to possession of a body for the purpose of burying it. Although the right of a person to provide disposition of his body after death by will is generally recognized, it is not too clear whether or not this right extends much beyond an indication of the type and place of burial. As a practical matter, if there is agreement between the surviving heirs, they can probably give a body to a scientific institution. If there are objectors, however, a court will probably limit their right to disposition by burial.

To overcome the vagueness of the common law, a number of states have enacted specific legislation to facilitate and clearly legalize such dispositions. These include Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Florida, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Minnesota, Nebraska, New Mexico, New York, North Carolina, Oklahoma, Oregon, Pennsylvania, Tennessee, Texas, Washington, and Wisconsin.

In Mississippi, such legislation is tied up in the Autopsy Law. According to a spokesman for the University of Mississippi School of Medicine, Mississippians wishing to donate their bodies or parts of their bodies to medical science should make arrangements with their next of kin since under the law the body belongs to the next of kin. They should also include their wishes in their will. This, however, is not necessarily binding on the heirs, although a deprivation clause may add strength to the disposition request.

One of the most comprehensive of legislative plans is now being proposed in Massachusetts. This proposal involves a card system, similar to one now in operation in California, by which a person officially declares his wish to leave organs or his entire body to aid other patients or further medical research. A project of Professor William J. Curran, director of Boston University's Law-Medicine Research Center, the legally binding "card" carried by the donor, would assure immediate transplants, spare the relatives any difficult discussions, and eliminate the legal barriers.

Pathologist Named UMC Assistant Dean

A new assistant dean has been named at the University of Mississippi School of Medicine. He is Dr. John Gronvall, 32-year-old pathologist.

His new administrative appointment will be half-time, and he will continue his teaching, research, and medical care activities as assistant professor of pathology. Dr. Gronvall received his B.S., B.A., and M.D. degrees from the University of Minnesota and completed his residency there. He interned at Minneapolis General Hospital.

He was appointed to the Medical Center faculty in 1960 as an instructor, shortly after finishing his residency. In the spring of 1963, he served on the committee for the First Faculty Retreat. Later he was appointed to the medical school curriculum planning committee.

Dr. Gronvall is a Phi Beta Kappa and a member of Alpha Omega Alpha. He is certified by the American Board of Pathology.

DEATHS

FIELD, COLUMBUS LEONIDUS, Shaw. M.D., Tulane University School of Medicine, New Orleans, La., 1911; died Oct. 22, 1963, aged 73.

JURNEY, LOUIS MARION, Oxford. M.D., George Washington University School of Medicine, 1943; interned Baroness Erlanger Hospital, Chattanooga, Tenn., one year; died Oct. 29, 1963, aged 46.

MANNING, CHARLES L., JR., Clarksdale. M.D., University of Tennessee College of Medicine, Memphis, 1946; interned U. S. Naval Hospital, Memphis, Tenn., one year; orthopedic residency, U. S. Naval Hospital, Chelsea, Mass.; orthopedic residency, Louisville General Hospital, Ky., one year; orthopedic residency, Shriners Hospital for Crippled Children, Lexington, Ky., one year; lieutenant, U. S. Navy; died Oct. 25, 1963, aged 45.

MONTGOMERY, ARLANDER HOUSTON, Burnsville. M.D., Memphis Hospital Medical College, Tenn., 1911; interned Baptist Memorial Hospital, Memphis, Tenn., one year; received certificate from the University of Tennessee College of Medicine,

Memphis, for 50 years of medical service; died Oct. 9, 1963, aged 89.

SHANDS, ROBERT EUGENE, New Albany. M.D., Vanderbilt University School of Medicine, Nashville, Tenn., 1931; interned U. S. Naval Hospital, Boston, Mass.; residency, Protestant Hospital, Nashville, Tenn., two years; member American Fracture Association, International College of Surgeons, Southeastern Surgical Congress, Southern Medical Association, and the Southeastern Association of Railway Surgeons; Fellow, American College of Surgeons; past president of the University of Mississippi Medical Alumni Chapter; lieutenant commander, U. S. Navy, two years; died Oct. 6, 1963, aged 56.

State Morbidity Reported Through Nov. 1

The Mississippi State Board of Health reports the following occurrence of morbidity for 1963 through the 44th week of the year, ending Nov. 1, 1963. Case totals reported are shown opposite the disease condition.

Tuberculosis, pul.	735
Tuberculosis, O.F.	37
Typhoid Fever	16
Encephalitis, infectious	18
Salmonella infections	21
Diphtheria	3
Dysentery	
Bacillary	67
Amebic	13
Dysentery, NOS	1
Food Poisoning, NOS	22
Diarrhea of Newborn	9
Septicemia, Strep.	1
Septicemia, Staph.	51
Septicemia, other	1
Septicemia, NOS	13
Septicemia of Newborn	6
Meningococcus infection	
Meningitis	21
Meningococcemia	2
Meningitis, O.F.	72
Gas Gangrene	1
Bac. Diseases, other	1
Polyneuritis	1
Poliomyelitis	8
Tularemia	2
Mononucleosis, infectious	96
Malaria, Vivax	1
Other Cestode Infest. (HN)	2
Hepatitis, infectious	538
Serum Hepatitis	1
Adenovirus (ARD)	3
Rocky Mt. Spotted Fever	1
Gastro-Enteritis	5
Helminthic infections	
Hookworm	1,135
Ascariasis	345
Strongyloides	60
Blastomycosis	1
Cryptococcosis	1
Myelitis	3
Sporotrichosis	2
Generalized Vaccinia	1
Rheumatic fever	7
Rheumatic heart	5
Histoplasmosis	13
Streptococcus infections	
Scarlet fever	251
Strep throat	2,214
Other inf. and parasitic diseases	1
Pertussis	89
Measles	742
Chickenpox	955
Tetanus	5
Mumps	641
Other complications of smallpox vaccination	3
Influenza	32,170
Gonorrhea	4,425
Syphilis	
Early	354
Late	142

AUXILIARY

Biloxi Auxiliary Elects 1963-64 Officers

Mrs. Frank O. Schmidt was named president-elect of the Biloxi Medical Auxiliary at an Oct. 9 meeting held in the Buena Vista Hotel.

Mrs. Wallace S. Sekul, president, introduced the other officers for 1963-64 as follows: Mrs. John J. Eberhart, vice president; Mrs. Robert F. Carter, Jr., secretary, and Mrs. William A. Tisdale, treasurer.

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Clinical Meeting, Dec. 1-4, 1963, Portland, Ore. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn, Chicago 10, Ill.

American Academy of General Practice, April 11-16, 1964, Atlantic City, N. J. Mr. Mac F. Cahal, Volker Blvd. at Brookside, Kansas City 12, Mo.

STATE AND LOCAL

Mississippi State Medical Association, May 11-14, 1964, Jackson. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Amite-Wilkinson Counties Medical Society, First Tuesday March, June, September, December. S. E. Field, Centreville, Secretary.

Central Medical Society, First Tuesday Monthly, 6:30 p.m., Robert E. Lee Hotel, Jackson. Jim G. Hendrick, 800 Carlisle St., Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday March and First Wednesday November, 2:00 p.m., Clarksdale. Whitman B. Johnson, Jr., 422 McWilliams Building, Clarksdale, Secretary.

Coast Counties Medical Society, Second Wednesday, January, First Wednesday, March, May, July, September, November. Charles N. Floyd, 1619-23rd Ave., Gulfport, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday January, April, July, and October, 1:00 p.m., Hernando Motel Cafe, Hernando. L. L. Minor, Route 9, Memphis 9, Tenn., Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. Robert M. Graham, 612 Dixie Towers, Meridian, Secretary.

Homochitto Valley Medical Society, Fourth Tuesday Monthly, 7:30 p.m., Natchez Country Club, Natchez. W. T. Colbert, Natchez General Hospital, Natchez, Secretary.

North Central District Medical Society, Second Wednesday March and September. Robert B. Townes, Jr., 1196 Mound St., Grenada, Secretary.

Northeast Mississippi Medical Society, Second Tuesday March, June, September, and December, Tupelo. Thomas W. Wesson, 420 Magazine, Tupelo, Secretary.

North Mississippi Medical Society, First Thursday April and October, Oxford. Marcus E. Morrison, 512 Van Buren Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucien Olen Crosby Memorial Hospital, Picayune, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. James C. Bass, Jr., 424-13th Ave., Laurel, Secretary.

Tri-County Medical Society, Second Tuesday March, June, September, and December. A. V. Beacham, Magnolia, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Tom H. Mitchell, The Street Clinic, Vicksburg, Secretary.

SUBJECT INDEX

The letters used to explain in which department the matter indexed appears are as follows: "E," Editorial; "N," News; "L," Letters to the Editor; "BR," Book Review; "JR," Journal Review; the asterisk (*) indicates an original article in the JOURNAL, and the author's name follows the entry in brackets. "Deaths," "Personals," and "New Members" are indexed under the letters "D," "P," and "M" respectively.

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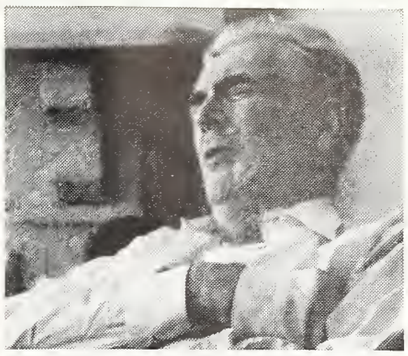
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The tense, nervous patient



The heart-disease patient



The surgical patient



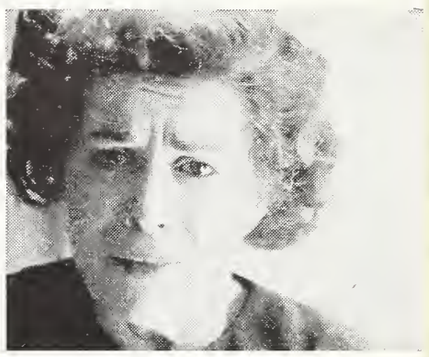
girl with dermatosis



Tension headache



The woman in menopause



Anxious depression



emenstrual tension



The agitated senile patient



The alcoholic



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Sixteen Speakers Slated For Atlanta Assembly

Sixteen physicians are slated to appear on the 1964 program of the Atlanta Graduate Medical Assembly scheduled for Feb. 17-19 at the Atlanta Biltmore Hotel.

Medicine, surgery, cardiology, obstetrics, gynecology, and pediatrics are subjects to be discussed during the three-day program.

Speakers and topics for the Feb. 17 program, entitled "A Day of Medicine," are: Dr. Jerome Conn, medical aspects of diabetes; Dr. Alvan L. Barach, emphysema; Dr. Owen Wangensteen, gastric cooling and freezing for manifestations of peptic ulcer; Dr. Belding H. Schribner, chronic renal failure, and Dr. Joseph Edward Rall, laboratory procedures in diagnosis of hyperthyroidism and thyroid disease.

Speaking on surgery Feb. 18 are: Dr. Harwell Wilson, blunt trauma and penetrating wounds of the abdomen; Dr. Champ Lyons, shock and problems in therapy of carcinoma of the breast; Dr. Weldon Bulloch, breast cancer and colonic polyps; Dr. James V. Rogers, Jr., mammography in diagnosis of carcinoma of the breast, and Dr. Richard K. Gilchrist, surgery of the colon and rectum in reference to carcinoma. Under the category of cardiology, the program for the second day also includes discussions by Dr. John Webster Kirklan of Mayo Clinic and Dr. Bernard Lown of Boston.

The last day of the program includes discussions on obstetrics and gynecology by Dr. Clarence D. Davis and Dr. C. Lee Buxton of Yale University School of Medicine. Dr. William Silverman of Columbia University, and Dr. Robert Goode of the University of Minnesota will present the pediatrics program.

Anesthesiology Seminar Set for Miami

The University of Miami and University of Florida Schools of Medicine have announced the First Annual Postgraduate Seminar in Anesthesiology for Jan. 5-8 in Miami Beach, Fla.

The theme for the seminar will be "The Cardiovascular System" with particular emphasis on this system in relation to anesthesia problems.

Consisting of five panel discussions, the program will cover these topics: physiological con-

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siderations in circulation, recent advances in the management of cardiac arrest, pharmacological considerations related to circulation, surgical and anesthetic management of the patient with heart disease, and hemorrhagic and septic shock.

American Thoracic Society Invites Papers for '64 Meet

The American Thoracic Society, medical section of the National Tuberculosis Association, invites submission of papers for presentation at the 1964 annual meeting scheduled for May 25-27 in New York.

According to Dr. Robert Oseasohn, chairman of the Medical Sessions Committee, papers to be presented will be selected from abstracts submitted before Jan. 6, and authors will be notified by Feb. 10, if their papers have been accepted.

Manuscripts on all scientific aspects of tuberculosis and nontuberculous respiratory and cardiopulmonary diseases are invited for presentation. Papers presented at the annual meeting must be original contributions not previously presented or published. Reports of interesting or unusual cases will be considered for inclusion in case conferences.

Abstracts of papers from investigators outside the United States must be written in English and presented in English at the annual meeting.

Membership in the Society is not a prerequisite to participation on the program. Further information and application forms may be received from Dr. Oseasohn at 1790 Broadway, New York 19, N. Y.

Hahnemann Plans Drug Therapy Course

Hahnemann Medical College and Hospital has announced a postgraduate course on cardiovascular drug therapy for Jan. 20-23, 1964, at the Motor Hotel, Philadelphia, Pa.

Sponsored by the department of medicine, the symposium is planned to evaluate the current cardiovascular armamentarium. The rationale and drug spectrum of antihypertensive drugs, antianginal compounds, diuretic agents, vasopressors, anticoagulant and antiarrhythmic drugs, and cardiotonic compounds will be explored in relation to their clinical pharmacologic application.



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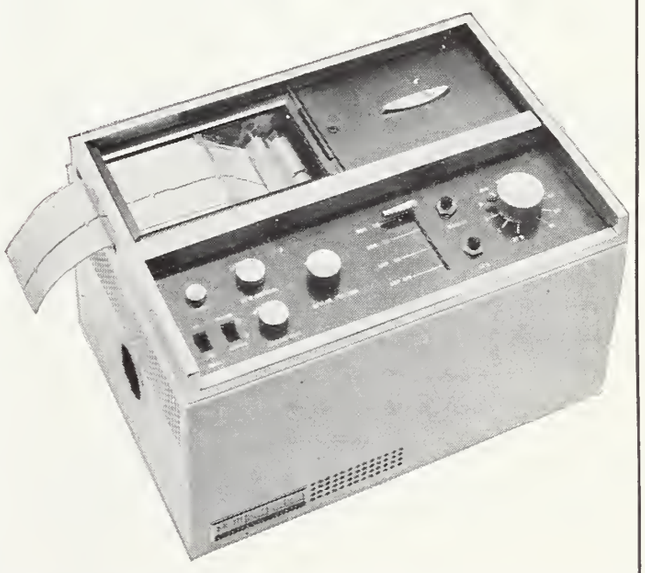
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A thesis summary of 75 to 100 words must accompany each manuscript separately from the text. Figures and drawings are acceptable when prepared with black ink on white paper. Photographs for illustrations should be unmounted, untrimmed, glossy prints and all such material must be identified. No charges are made to authors for illustration engravings not exceeding four column inches per printed page.

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